MIDDLE EAST@WAR No.30

AIR POWER AND THE ARAB WORLD

1909-1955

VOLUME 3: COLONIAL SKIES 1918-1936

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Dr David Nicolle &
Air Vice Marshal Gabr Ali Gabr

MIDDLE EAST @WAR SERIES

CONTENTS

Acknowledgements 2
Preface 2
Addendum to the previous volumes 2
Introduction 3

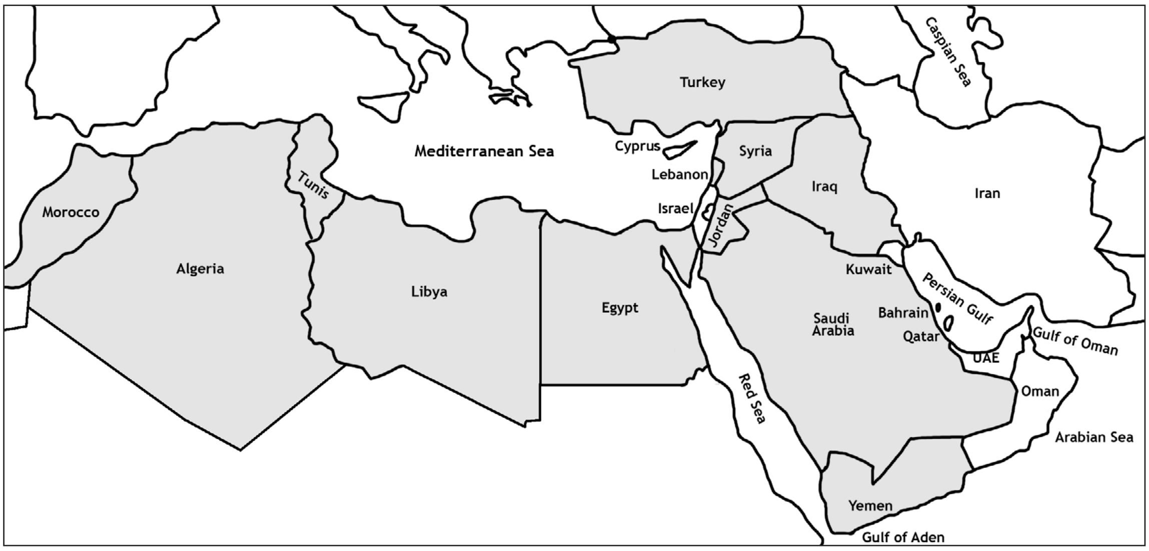
Part One: North Africa as an Area of Military Experimentation

1 The Arab Maghrib under France and Spain 3
2 Spanish air operations in Northern Morocco 5
3 French air operations in North Africa 17
4 Italian air operations continue in Libya, and events in East Africa 24

Part Two: Air Policing in the Middle East

5 The Arab Middle East under Britain and France 43
6 French air operations over the Levant 48
7 British air operations in the Arab World 53
8 Neighbours: the Iranian and Ethiopian Air Forces 80

Bibliography 86
About the Authors 88



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DEDICATION

For Air Commodore Abd al-Moneim Miqaati (8 July 1904–5 April 1982)
in memory of a meeting in Groppi's in 1970

"There came to me from my own boyhood memories of certain passionate admirations long passed away, and the objects of them long ago discredited or dead." (*St Ives*, Robert Louis Stevenson [unfinished, completed by Robert Quiller-Couch] London 1898)

ACKNOWLEDGEMENTS

So many people have helped in so many ways in the research and long preparation which result in this book that it seems unjust to name but a few. The authors' researches have, in fact, extended over so many decades that many of those men and women who contributed along the way are sadly no longer alive. They include officers and men from several of the air forces which feature in this study, along with their families, descendants and friends, plus journalists and broadcasters from a number of countries and, of course, enthusiasts whose admirable dedication to the history of various Arab air forces not only unearthed a great deal of information but helped to keep the authors' own enthusiasm alive over the years.

In a spirit of fairness it should also be pointed out that a few of these enthusiasts come from "the other side of the hill", in Israel, where they have braved criticism by providing sometimes sensitive information and by also questioning the accepted "facts" as presented by official Israeli sources.

David Nicolle also wants to thank those who helped him with translations, especially Waleed Miqaati, Ali Tobchi and Hebatallah Ghanem. Their work on the REAF Operational Diary from the Palestine War (1948-9) which was written in often hurried Arabic handwriting and was only available in a low definition scan of a "third carbon copy", was invaluable. Other documents, such as scraps cut from old magazines and then photographed by mobile phones, were almost as difficult to decipher. Nevertheless, we still wish to mention the following people, whose contributions were vital:

Air Comm. I.H. Gazerine, Air Marshal M.S. el Hinnawi, Air Comm. A.M. el Miqaati, Air Marshal Sa'ad el Din Sherif, Air Vice Marshal V.H. Tait, Giani Cattaneo, Nour Bardai and the members of Group 73 Aviation Historians, Capt. Wigdan Fadel, Air Comm. Fouad Kamal, Lon Nordeen, Mrs. Patricia Salti, Mrs. Munira Kafafi, Adli el Shafei, Fouad Sabri, Grp. Capt. Kamal Zaki, Air Marshal Taher Zaki, Sherif Sharmi, Capt. Sherif Abu Zaid, Mrs. Mona Tewfik, Grp. Capt. Usama Sidqi, Vasko Barbic, Fl. Lt. F. Weston, Eric Thomason, George Agami, Pierre Jarrige, and Eugène Bellet.

PREFACE

Where the problems and pitfalls of writing about Arab Air Forces and their confrontation with the Israeli Air Force are concerned we can do no better than quote directly from Lon Nordeen's work; *Middle East Air War Overview*:

> The Middle East is a very challenging area to identify air warfare claims and losses. All of the participants (Egypt, Syria, Jordan, Iraq, Lebanon and Israel) have demonstrated superior skills in maintaining security, secrecy and using press reports to paint the best picture for their side. Determining the truth in this region is along the same lines as assembling a jigsaw puzzle; movement of lots of pieces (of information) to slowly reveal an image but almost never the whole picture. Unlike Rene Francillon's OVERKILL analysis of North Vietnamese and U.S. air warfare claims, there is no official Arab or Israel document available to use as a reference which is independent and verified. So, the following is an analysis using the best information from a multitude of sources.

ADDENDUM TO THE PREVIOUS VOLUMES

One of the great pleasures of undertaking historical research is the feedback that can result. For example, the publication of the first volume in this series of books led to the volunteers who run my "local museum" in Barnet, north London, mentioning that the museum possessed an album of photographs taken in the Middle East during the First World War. Furthermore, these photographs included many showing British, German and perhaps French aeroplanes. The album had been given to Doctor Ian Johnston by the family of one of his aged and lately deceased patients, Ernest Douglas Phare (aka Ernest Dondas Phare), a resident of Barnet. Doctor Johnston then donated the album to Barnet Museum.

This album has never been published and lacks almost any further information, but Douglas Phare is known to have volunteered for the Royal Flying Corps as a despatch rider early during the Great War. Douglas Phare was then sent to Egypt and was stationed "near Alexandria", either at the RFC Depot at Abu Qir or in Alexandria itself. He also went to Cairo on several occasions. Here he went up in an observation balloon near the Pyramids of Giza, which was probably part of an RFC "balloonatics" training establishment. Subsequently Douglas Phare was transferred to the Macedonian Front in northern Greece, apparently as part of the Headquarters Photographic Section, 16th Wing RFC in Salonica later in 1916. Here Douglas Phare continued to take photographs, several of them contrary to regulations – and we must be grateful to him for doing so.

Egyptian labourers moving a crated BE2c, serial number 4504 which was assigned to No. 17 Sq. in January 1916, probably in Alexandria docks. (Douglas Phare photograph album, Barnet Museum)

Even rarer are photographs of Egyptian Army personnel outside the Middle East, but one has recently emerged showing an Egyptian officer of the ELC (Egyptian Labour Corps) or more likely the ELC Military Police on the Macedonian Front. He is amongst those looking at a German DFW C.V two-seater of FA 20 based at Drama, which had been forced down by a pair of British S.E.5a Scouts of No. 17 Squadron on 20 March 1918. The German crew and the men who downed them were photographed together in front of the DFW. It is perhaps worth noting that this area lay at the extreme eastern end of the Macedonian Front, close to what were then the notoriously malarial swamps of Lake Tahino (since drained). Perhaps the Egyptian conscripts were thought better able to endure this pestilential area.

INTRODUCTION

THE ARAB LANDS IN THE AFTERMATH OF THE GREAT WAR

This book cannot present the complex history of the Arab world during the Interwar years but will instead focus upon the role of the colonial powers; namely the United Kingdom, France, Italy and Spain. The most powerful military forces in the Middle East during this period were naturally those of the British, French and Italian colonial empires, with Turkey rapidly re-emerging as a significant regional player along with Iran, then still generally known as Persia. Meanwhile, within the United Kingdom there was a widespread and perhaps even general assumption that, following victory in the Great War, the British Empire would be the dominant power in the Middle East. More immediately, the British government needed to sort out the many confused, competing or overlapping areas of British policy in the Arab World. However, the resulting Cairo Conference of March 1921 failed to clarify many pressing issues.

Despite the inadequacy of the Cairo Conference, most within the British military establishment assumed that the entire Arabian Peninsula would now fall within a British sphere of influence. This was, therefore, where their focus initially lay, but such a confident assumption resulted in a neglect of the local defence of Aden and the Aden Protectorate. France was the United Kingdom's only real rival as an imperial power, and the French had no apparent reason to challenge British supremacy in this part of the Arab world.

Italy, of course, held Eritrea on the other side of the Red Sea and was known to have wider ambitions. Yet Italy was still regarded as a secondary power. Furthermore, the British political and military elites believed that they had "allowed" Italy into the Red Sea in the second half of the 19th century, but only on British sufferance. Only later, as Mussolini proclaimed a greater imperial destiny for his country, did Britain pay closer attention to Italian activities on both sides of the Red Sea. This led the British Empire to reach an agreement with Italy in 1927, whereby both agreed to consult on matters pertaining to the Red Sea and Arabia. This not only concerned Yemen and Asir but was intended to ensure that neither country risked being drawn into the persistent quarrel between Saudi Arabia and Yemen.

PART ONE

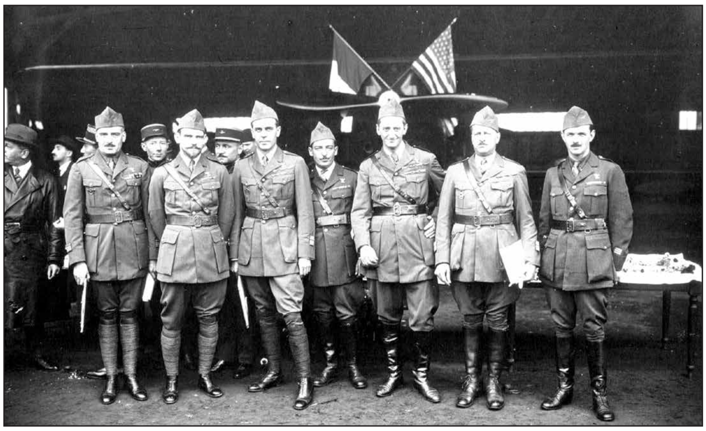
NORTH AFRICA AS AN AREA OF MILITARY EXPERIMENTATION

1

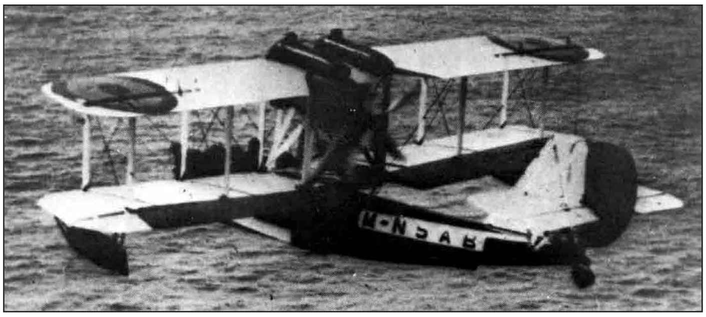
THE ARAB MAGHRIB UNDER FRANCE AND SPAIN

In North Africa, the political situation differed within the three countries now under French domination. In Tunisia, any manifestation of organised nationalism had been forced underground by 1912, though it revived in the aftermath of the First World War. Here, as in Egypt and many other parts of the Arab world, the concept of national self-determination and independence had been encouraged by US President Woodrow Wilson's Fourteen Points, and also by the formation of the League of Nations in January 1920. In this political climate Tunisian nationalists established their Destour or "Constitution" Party in June 1920. Internal tensions led to this political party splitting in 1934, resulting in the creation of the Neo-Destour Party, amongst whose leaders was Habib Bourguiba; later to become the first President of an independent Tunisia.

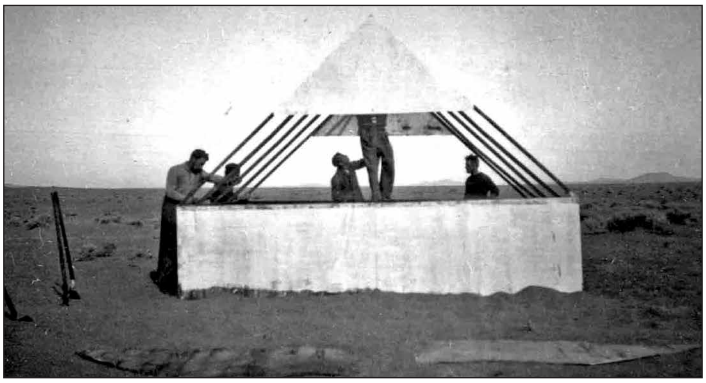
The situation in neighbouring Algeria was entirely different. Here the indigenous Arab, Berber and Jewish populations had been regarded as French subjects, though not as French citizens, since 1856. Offered French citizenship nine years later, few took this up because it implied an acceptance that Algeria was now part of France. Religious Muslims also tended to see acceptance of French citizenship as a form of apostasy because it involved recognising that French secular law took precedence over Islamic Shari'a law. The fact that Algerian Jews would soon be automatically considered full French citizens, whether they wished to be or not, drove an increasingly dangerous wedge between Muslims and Jews in a land characterised by largely peaceful coexistence between these communities since the arrival of Islam in the 7th century.



Col. Charles Sweeny (third from right) with American volunteers of the *Escadrille de la Garde Chérifienne*, sometimes also called the 2nd Lafayette Squadron. They are seen in front of one of their Breguet XIV A2 bombers at Le Bourget aerodrome outside Paris in August 1925, prior to flying to Rabat in the French Protectorate in Morocco where they would be attached to the 37th Air Regiment. (Jarrige archive)



Early in 1924 the Spanish government ordered twelve Supermarine Scarab amphibians for its Navy. One was damaged prior to delivery and seven were damaged while being transported on the deck of the Spanish carrier *Dédalo*, leaving four to be used against the so-called Rif Rebellion in northern Morocco. (Archivo Historia del Ejercito del Aire)



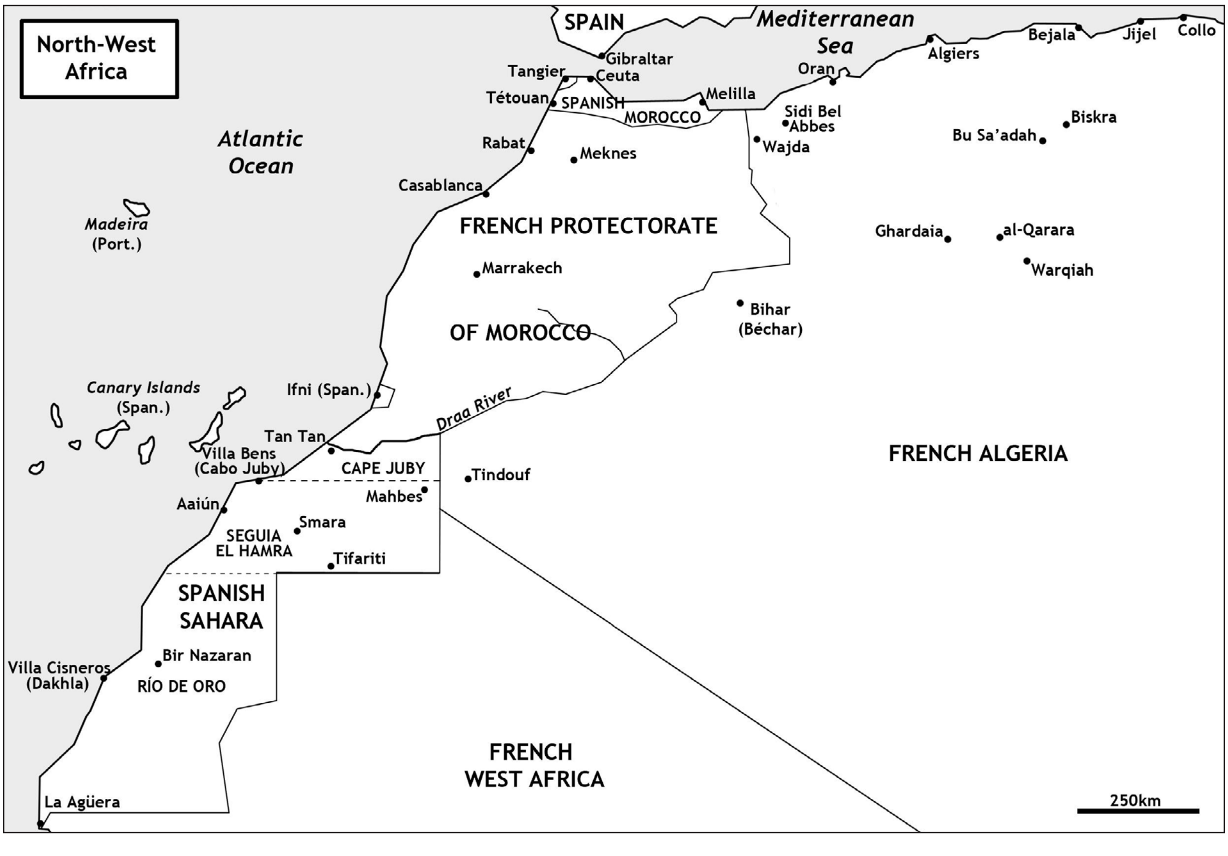
Between 1929 and 1935, once flights into Algeria's Saharan interior became more common, the French constructed a system of route markers and signposts for passing aeroplanes. They included pyramid shaped structures erected at ten-kilometre intervals close to the main desert track. (Jean Studer photograph, Jarrige archive)

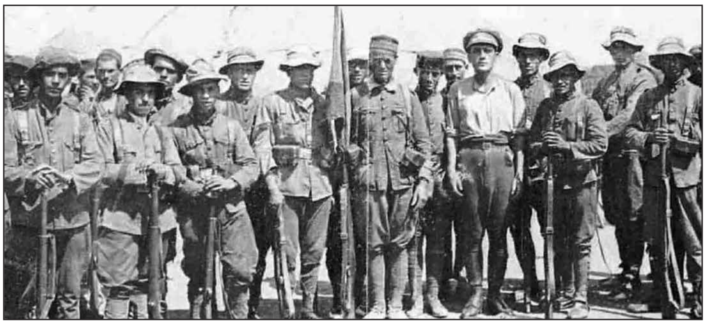
Another system of assisting passing aircrew consisted of signposts indicating the direction to the next significant settlement, in this case Amguid (now Amqid) with its famous meteoric crater, about 400kms north of Tamanrasset. Pilots were expected to follow the existing track at an altitude of 200 metres so that such signs could be read. (Jean Studer photograph, Jarrige archive)

SITIO DONDE

The Spanish Army outpost at Tifaruin was vulnerable following a major Spanish defeat at the Battle of Anwal and was soon threatened by Rifian forces. This aerial reconnaissance photograph of the besieged outpost was taken during 1923. (Archivos Militares, Madrid)

New Muslim leaders had also emerged in Algeria during the First World War while the interwar years would see a number of local political groups gradually come to prominence. The French colonial authorities were increasingly dominated by the *colons* or European settlers, widely known as *pieds noirs* or "black feet". Nevertheless, despite political unrest and increasing repression, it was only after the Second World War that simmering Algerian unrest came to the boil.


North-West Africa
SPAIN
Mediterranean Sea
Gibraltar
Tangier
Ceuta
Tétouan
SPANISH MOROCCO
Melilla
Oran
Algiers
Bejala
Jijel
Collo
Sidi Bel Abbes
Wajda
Biskra
Bu Sa'adah
Atlantic Ocean
Rabat
Meknes
Casablanca
Madeira (Port.)
FRENCH PROTECTORATE OF MOROCCO
Marrakech
Ghardaia
al-Qarara
Warqiah
Bihar (Béchar)
Canary Islands (Span.)
Ifni (Span.)
Draa River
Tan Tan
Villa Bens (Cabo Juby)
CAPE JUBY
Tindouf
FRENCH ALGERIA
Mahbes
Aaiún
Smara
SEGUIA EL HAMRA
Tifariti
SPANISH SAHARA
Villa Cisneros (Dakhla)
Bir Nazaran
RÍO DE ORO
FRENCH WEST AFRICA
La Agüera
250km



The Spanish defenders of Tifaruin after they had been relieved on 22 July 1923. (Archivo Historia del Ejercito del Aire)

Morocco was still technically a sovereign state, even though the Protectorate Treaties with France and Spain had deprived the ruling Sultan of almost all his power. In both the French and the Spanish Protectorates, the country was supposedly ruled by colonial administrators, though their writ only ran where French and Spanish armies could impose it. As a result there were still parts of the French Protectorate where European authority seemed distant. This was even more true of the Spanish Protectorate, where a great deal of the mountainous countryside lay beyond Spanish control.

In the French Protectorate, despite the legal status of the Sultan's government, there was an increasing tendency for French administrators to support the interests of French settlers, mining companies and other European businesses such as railway or shipping companies. This in turn led to French resistance to any expression of Moroccan autonomy. Here, as in Algeria and Tunisia, large numbers of European colonists from France and elsewhere also purchased substantial areas of the best agricultural land.

2

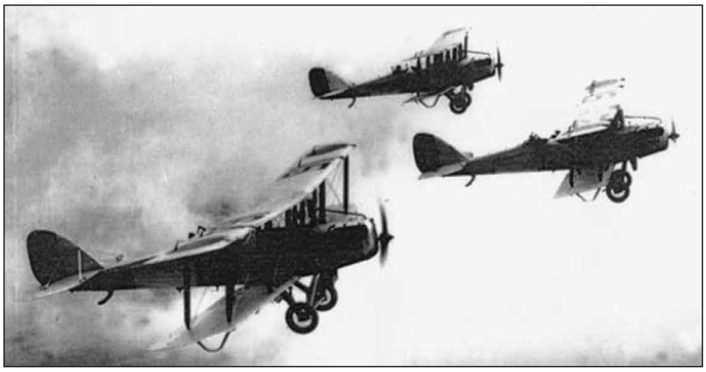
SPANISH AIR OPERATIONS IN NORTHERN MOROCCO

Spain had not been a belligerent during the Great War. Nevertheless, the end of that conflict saw the Spanish military, and especially the air arm, weakened due to the country's inability to obtain virtually any modern or even replacement equipment from outside its own borders. The situation then changed dramatically as surplus weapons, largely from the victorious powers, became available in substantial numbers and at reduced cost. Spain appears to have been the main beneficiary, although dissident or "rebel" forces in the Rif Mountains were also able to obtain modern light weapons, in large part from redundant German stocks. As a result, the so-called Rif Rebellion of 1918 to 1921 became, in technological terms, a very different affair when compared to earlier fighting in this region.

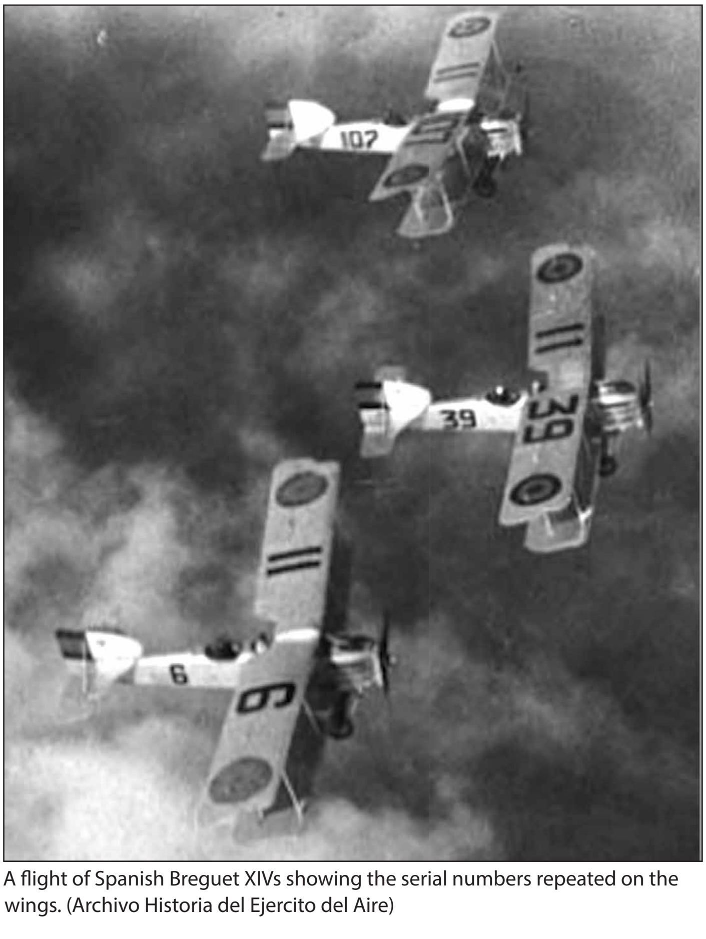
It did not take the Spanish government long to put a more ambitious and aggressive military plan in place for the Spanish Protectorate in northern Morocco. Spain was a constitutional monarchy and, in December 1918, the Cortes or parliament agreed that the country's armed forces should initiate gradual military advances in the country's still largely nominal Protectorate. The following month Gen. Damaso Berenguer, who had previously been Minister of War, was assigned the task of overseeing these operations. He in turn nominated Gen. Manuel Fernández Silvestre as General Commander of the long-held Spanish enclave of Melilla. From here Silvestre was to advance inland and seize Ajdir, the "rebel" or resistance capital not far from the bay of Al Hoceima (al-Husaymah).

Although the resulting offensive began in May 1919, significant Spanish air operations had to wait until August when a modern French twin-engined Farman F.50 was sent to Titwan. Even so, air operations remained limited to the western part of the Protectorate until January 1920. During this immediate post-war period the Spanish also had eight Breguet XIVs and 16 De Havilland DH.4s purchased from French and British stocks, plus some De Havilland DH.6 trainers and DH.9 bombers built under licence by the Hispano-Suiza factory in Guadalajara. From October 1919 several Breguet XIVs were sent to Titwan, one of which was flown directly from Cuatro Vientos near Madrid by Lt. Carlos Carvajal Morenés on 28 October. Four others were transported by rail and ship, eventually forming a mixed squadron with Breguet XIVs, based at both Titwan and Larache (al-Arash).

Next, a squadron of Rolls-Royce powered DH.4s was formed, ready to be sent to Zilwan near Mellila at the eastern end of the Protectorate. In January 1920 these air units at Titwan, al-Arash



Three De Havilland DH.9s of the Spanish Aeronáutica Española, photographed around 1921. They were probably amongst those built under licence by the Hispano-Suiza factory in Guadalajara. (Archivo Historia del Ejercito del Aire)



A flight of Spanish Breguet XIVs showing the serial numbers repeated on the wings. (Archivo Historia del Ejercito del Aire)

(Larache) and Zilwan (Zeluán) were formed into the African Squadrons Group. Meanwhile aircraft manufacture at Cuatro Vientos effectively stopped until 1923; the Spanish air arm now relying on imported machines. During this period things seemed to be progressing well for Gen. Silvestre in Morocco, significant territory being seized and Spanish prestige largely restored. On the other hand, Silvestre's lines of communications and resupply were getting longer and more vulnerable.

On 28 January 1920, a new elite force was created, the Spanish Foreign Legion. Though modelled upon the famous French Foreign Legion, the Spanish version differed significantly. Apart from being fiercely patriotic, the Spanish Foreign Legion was also profoundly Catholic. The Spanish Foreign Legion cultivated an ideology of glorious death upon the battlefield and one of the stranger mottos attributed to this military formation was "Long Dive Death". As one commentator wrote: "In the French Legion, death in battle was a virtue; in the Spanish Legion it was an obsession". Distasteful to most modern observers, this characteristic resulted in high motivation and ferocity which would show itself during the Al Hoceima Landings in September 1925. The Spanish Foreign Legion also contained a much smaller proportion of foreign soldiers than its older French counterpart, and none of these men became officers until the outbreak of the Spanish Civil War in 1936. Non-Catholic recruits were relatively few in number but did exist. In fact, Protestant Legionaries were allowed to replace the otherwise obligatory attendance at Sunday Mass, with extra drill.

In January 1920 Gen. Silvestre decided to push ahead with operations against Mulay Ahmad al-Raisuni, though there is said to have been little coordination between actions in the east and west of the Spanish Protectorate. For a while, matters progressed well. The flying units at Titwan and al-Arash collaborated closely with Spanish troops though their aeroplanes were too few to have much offensive impact. In the east, meanwhile, Gen. Silvestre's ambitious offensive appeared to be going from strength to strength, supported by the Spanish air squadron at Zilwan. More and more territory fell under Spanish control, almost reaching the goal of Al Hoceima. However, there were already voices warning that there were not enough Spanish troops – and certainly not enough Spanish aeroplanes – to control this expanding territory.

Back in Spain, the year 1920 saw a seemingly esoteric discussion under way about regulations on the granting of certain military decorations. For example, rules concerning the Laureate Cross of San Fernando had been drawn up in 1811 and were so prescriptive that it was unclear how they could apply to airmen who rarely came face to face with individual foes. Eventually a Royal Decree was issued on 5 July 1920, Article 58 of which laid out the very specific circumstances in which an airman could be awarded the Laureate Cross of San Fernando.

Although aeroplane manufacture had ceased at Cuatro Vientos, Spain continued to play its part in the further development of flight, most notably in rotorcraft. As far back as 1916, Raúl Pateras Pescara de Castelluccio, an Argentinian of Italian descent was working on this problem in Barcelona, soon collaborating with Heraclio Alfaro Fournier in an attempt to make a viable machine. Unfortunately, Alfaro went to America before they got very far but Pateras Pescara's machine was finally ready and flight testing began in February 1921; the primitive craft achieving some success by 1924.

Another line of development was the autogyro and this time a Spaniard played the leading role. He was Juan de la Cierva whose first three models were constructed between 1920 and 1922 at Cuatro Vientos. De la Cierva's fourth and at last successful autogyro made its first controlled flight on 17 January 1923 but, like so many Spanish aviation pioneers before him, Juan de la Cierva soon found it necessary to transfer his project to another country, choosing Britain where he established the Cierva Autogiro Company.

King Alfonso XIII, Eduardo Barrón and some senior officers inspecting an unidentified aeroplane, described as a prototype reconnaissance machine, at Cuatro Vientos on 19 February 1923. The aeroplane might be an early version of what became the Loring R.I. (Archivos Militares, Madrid)

Of more immediate use to the Spanish Air Force and its efforts in northern Morocco, were the activities of Eduardo Barrón. During 1918, he focussed upon reorganising the aviation section of the Hispano Company, but the publication of a Royal Order on 5 September would open up new opportunities for the 30-year-old aero-engineer. This Royal Order decreed a competition for the design of specifically Spanish military aircraft, supervised by Julio Rodríguez Mourelo, now a General and Director of the Military Air Service. Barrón promptly set about designing a two-seater reconnaissance machine and a single seater fighter. There was little time to waste as the deadline stated that these aeroplanes must be ready for testing within five months. In fact, the Hispano Company presented two machines at Cuatro Vientos which, like entrants put forward by some other designers, had yet to take to the air.

Despite the excellent performance put on by Barrón's two aeroplanes which were flown by Híspano's test pilot, the Chilean Luís O'Page, this project came to nought because the urgency of Spain's need for modern military aircraft meant that it again turned to foreign suppliers. The British were eager to sell surplus warplanes now that the First World War had ended and in April, Hereward de Havilland, younger brother of the famous aircraft designer Geoffrey de Havilland, displayed a powerful DH.9 at Cuatro Vientos. With its 450hp Napier Lion engine, this battle-proven aeroplane put Eduardo Barrón's 180hp design in the shade. This was followed in mid-May by a display of other foreign aeroplanes, including the British DH.4, Bristol F.2B and even a four-engine Handley Page V/1500, while France displayed their twin-engine Farman F.50 which had entered French service just as the Great War came to a close.

Although Barrón's fighter and reconnaissance aeroplanes were "highly commended", having shown superiority over their British and French rivals in a few respects, they remained unproven in war and no orders were forthcoming. The fact that the De Havilland DH.9 had greater range also played its part, given the conditions that would be faced over the Spanish Protectorate in northern Morocco, consequently this design was most favoured by the Spanish Air Force. The Hispano Company now gave up the idea of designing and developing its own aeroplanes, and instead obtained the rights to construct DH.9s in Spain. Disappointed, Eduardo Barrón returned to active service and, on 1 January 1921, joined the airmen stationed at La Tablada aerodrome.

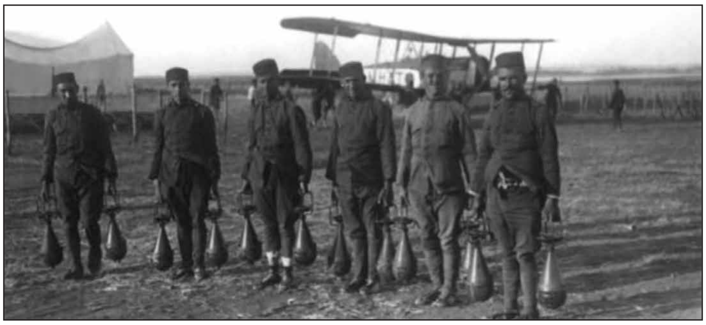
Barrón's fortunes might have revived when, in July 1921, he received an invitation to become head of an "air postal service" to operate between Seville in southern Spain and al-Arash in the Spanish Moroccan Protectorate. Then, on 22 July 1921, Spanish forces in Morocco suffered a catastrophic defeat at the hands of Rif "rebels" at the Battle of Anwal. This changed everything, not least for Eduardo Barrón who was promptly ordered back to Cuatro Vientos.

During the first half of 1921 Gen. Silvestre's campaign in northern Morocco had run into serious logistical difficulties. Nevertheless, the General pressed ahead undaunted, resulting in the first major battle of what was known as the Rif War. Not all the tribes of the Spanish Protectorate fought under Sidi Muhammad Ibn Abd al-Karim al-Khattabi (better known in Europe simply as Abd al-Karim or Abd al-Krim), leader of the Rif resistance. Those that did also had a number of different motivations. For some it was primarily religious, for others nationalist. Abd al-Karim himself later declared that he had wanted to establish a Moroccan Republic, but first he had to unite the traditionally competing Berber and Arab tribes under one Islamic banner. Abd al-Karim then had to form the traditional *harka* war-bands into a modern-style army, which he did with remarkable success. As a result the Spanish Army found itself fighting against a united foe for the first time. Meanwhile Gen. Silvestre's efforts to get reinforcements from Spain failed, and he had to defend an expanding perimeter – currently about 55kms long – with around 4,000 men.

Abd al-Karim's counterattack began with an assault upon a small outpost in the Albarran Mountains. This was largely garrisoned by indigenous Moroccan troops under Spanish officers. Two Spanish aeroplanes appeared from the east on 2 June, flew over the threatened outpost and tried to strafe the largely invisible "Rifian insurgents" on neighbouring heights. Climbing and returning, these aeroplanes then dropped their bombs – with unknown results. They had, however, boosted morale in the small and isolated Spanish blockhouses.

Nevertheless, in June 1921 one Spanish outpost was overrun and over half its garrison killed. Gen. Silvestre confidently counterattacked on 1 July, intending to retake the Albarran, but the Rifians then attacked his lines at Anwal where Abd al-Karim's men inflicted a major defeat on the Spanish Army. The Battle of Anwal on 22 July 1921 was a disaster for Spanish arms and as a result Gen. Silvestre committed suicide. Other clashes followed, during which large numbers of Spanish troops were killed or captured, and by July the remainder had retreated to the original Spanish enclave of Melilla.

One consequence of this crisis was that Eduardo Barrón re-joined his colleagues at Cuatro Vientos on 31 August, as Inspector of Workshops and Warehouses. His task was to strengthen the aviation workshops, and so enable them to cope with urgent demands from northern Morocco. This he did with vigour. During 1922 Eduardo Barrón also produced a report on the organisation of supplies, proposing the creation of aircraft parks and this was accepted in general terms. Barrón's next posting was as commander of the air base outside Seville, as from 3 July 1922. Nevertheless, this role did not stop him designing a new reconnaissance monoplane with a cantilever wing. It was intended to take part in a competition between domestic and foreign machines at Cuatro Vientos, but was not ready in time. Instead non-Spanish aeroplanes were selected for the Spanish Air Force, including the Dutch Fokker C.IV which was to be manufactured under licence by the Loring Company in a new factory next door to Cuatro Vientos. Eduardo Barrón was, in fact, appointed director of this new factory.



Ground crew carrying Carbonit 10kg bombs which Spain had initially imported from Germany in 1914, and were later manufactured in Seville. The Aeronáutica Española relied on such old-fashioned weapons for many years. In the background is a DH.9 with the early form of pseudo-civil registration applied to British supplied aircraft, with lettering on a long white panel which also included the Spanish red and yellow roundel. (Archivo Historia del Ejercito del Aire)

Meanwhile the Spanish defeat at the hands of Rifian "rebels" at the Battle of Anwal was more than just a military setback. It would also have profound military and political consequences. On the other side, Abd al-Karim's dramatic victory over Gen. Silvestre gave him the prestige to emerge as a genuine nationalist leader, largely because had was in personal command of the Rifian warriors who had trounced the Spanish Army. Furthermore, many Moroccan police and auxiliary troops who had been in Spanish service, defected to Abd al-Karim during and after the battle of Anwal.

Unlike Italy, Spain has been reluctant to admit its use of chemical weapons during colonial campaigns in North Africa between the First and Second World Wars. Only one major Spanish historian, Juan Pando, is believed to have done so (as of 2018). Yet it is clear that Spanish aeroplanes dropped mustard gas bombs on the Rifians during this long and bitter struggle, while on the ground the Spanish Army also used much the same toxic chemicals as had been used by most combatants during the First World War. Furthermore, Spain was accused of deliberately using such weapons against civilian targets, including markets and river crossings. Three weeks after the Spanish disaster at Anwal, the Spanish High Commissioner in the Spanish Protectorate, Gen. Damaso Berenguer, wrote in a telegram dated 12 August 1921 that: "I have been obstinately resistant to the use of suffocating gases against these indigenous peoples but after what they have done, and of their treacherous and deceptive conduct, I have to use them with true joy."

By now the port-city of Melilla, held for centuries as a Spanish outpost on the North African coast, was threatened. Its defence, and the tasks of restoring Spanish military prestige and of punishing Rifian dissidents, fell to the aircrew and technicians of the African Squadrons Group. The squadron based at Zilwan outside Melilla currently had eight De Havilland DH.4s which were busy throughout the campaign, flying reconnaissance and bombing missions at all hours. For example, on Saturday 23 July DH.4s from Zilwan gave direct support, as well as reconnaissance information, to a Spanish garrison retreating from Tugunt, about 45kms south-west of Melilla. But communications had been so disrupted that the returning aircraft were not aware that Zilwan aerodrome was itself under attack; that is, until they landed. The following day the Rifians launched a direct assault, as a result of which the Zilwan Squadron lost its aircraft though, during the defence of the airfield, a soldier named Francisco Martinez Puche earned a posthumous Distinguished Cross of San Fernando, the third to be granted to Spanish Army Aviation.

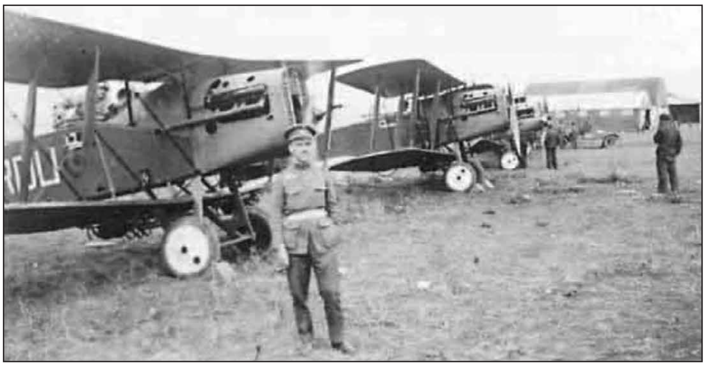
Zilwan was lost, along with its DH.4s, so Ortiz Echagüe – now a General – decided that the threat to the Melilla enclave was so great that the squadrons at Titwan and al-Arash should send some of their men and machines to an emergency airfield at the Melilla race track. On 29 July two aeroplanes arrived at the hurriedly prepared airfield; a Bristol Tourer (based upon the First World War Bristol Fighter) flown by Capts. Manzaneque and Carrillo, and a DH.4 flown by Capts. Moreno Abella and Bede. However, the De Havilland was damaged while landing on the still unfinished landing area.

The Bristol was almost immediately sent to reconnoitre the area around Melilla, whose military commander had been virtually blind for four days. Thereafter Manzaneque and Carrillo dropped supplies to some outlying positions where Spanish troops were still holding out, though no more than 50kg of food or munitions could be carried at one time. In this crisis the newly formed Spanish Foreign Legion and substantial numbers of *Regulares* or regular Spanish troops were rushed from Titwan to break the siege of Melilla. On the other side, however, Abd al-Karim had ordered his men not to assault Melilla, fearing that any threat to the many European citizens living there would turn other powers against him. Nevertheless, he later described this order as the biggest mistake of his career.

The French in their Moroccan Protectorate were almost as shocked by Abd al-Karim's sudden success as the Spanish had been and were more supportive of Spain's campaign to retake lost territory. As a result, in late 1921 Paris agreed to sell to Spain 11 Renault FT-17 light tanks, six Schneider CA1 tanks armed with relatively heavy 75mm guns and other crucial war material, such sales having previously been blocked by the French government. The British also changed their position, being more willing to sell military aeroplanes to Spain, including Bristol F.2B Fighters, De Havilland DH.4s and 9s, and, somewhat later, new Supermarine Scarab amphibians for the Spanish Navy. These British machines were also given government approved, pseudo-civilian five letter registrations in which M stood for Spain, and either A for Army or N for Naval. The final three letters indicated the aeroplane's role, basic form and individual identification. Surprisingly, it seems that for a while several such British warplanes went into action over northern Morocco still bearing these peculiar registrations.

On 2 August 1921, the squadron from Titwan landed on the now properly prepared race track aerodrome outside Melilla. Led by Captain Saéz de Buruaga, it consisted of five DH.4s and although its presence boosted morale in Melilla it could do little to change the course of events. Zilwan fell to the enemy on 3 August, with Monte Arruit following six days later. Now, for the first time in many years, Spain appeared to unite in a common cause; namely to restore the country's badly damaged prestige. Under the command of Gen. José Sanjurjo y Sacanell, the Spanish Army counterattacked, regaining some important outposts including Nador and Monte Arruit by 24 September. Here the Spaniards found the decaying corpses of thousands of their comrades, dating from the Battle of Anwal on 22 July 1921. Gen. Sanjurjo would later become known as "The Lion of the Rif", but sadly he would also be one of the leaders of a military uprising which led to the Spanish Civil War in 1936.

Meanwhile an upsurge in support in Spain for the struggle in Morocco resulted in a nationwide subscription for new aeroplanes. When added to a new government budget, this enabled the purchase of around forty DH.4s and DH.9s from the United Kingdom, as well as eight DH.9A machines manufactured under licence in Spain by the Hispano-Suiza engine factory at Guadalajara. The first of the latter became available in 1922 but production was limited because, paradoxically, Hispano-Suiza had to import suitable engines.



Bristol F.2Bs lined at the Spanish airfield of Nador, a short distance south of Melilla in July 1923. Standing in the foreground is Capitán Baeza who sometimes flew as observer for the well-known Spanish pilot, Capitán Boy Fontelles. The nearest aeroplane has a later version of the pseudo-civil registration given to British machines sold to Spain; in this case M-MRDU. (Boy family archive, Museo del Aire)

A Spanish Bristol F.2B taking part in what almost looks like a modern version of the traditional Moroccan cavalry "fantasia", the horseman being a Moroccan *sipahi* cavalryman in Spanish service while the Bristol still has a pseudo-civil registration in the old style white rectangle on its fuselage. (Archivo Historia del Ejercito del Aire)

Despite their relatively small number, the effectiveness of these Spanish military aeroplanes had a significant impact on Rif morale. The Spanish aircrews hit "rebel" artillery positions with increasing accuracy, strafed enemy troops, ruthlessly bombed their villages and set fire to their crops.

On 13 October, a second squadron of De Havillands arrived in north-eastern Morocco, under Capt. Luis Moreno Abella. Both these Spanish squadrons then left the old racetrack and established themselves on a new aerodrome at Nador, just south of Melilla, on 18 October. This later came to known as the Tauima airbase and is now Melilla airport. A third aviation Group arrived in the western end of the Spanish protectorate during November 1921. Led by Engineering Col. Jorge Soriano, it consisted of a squadron of French manufactured Breguet XIV bombers based at al-Arash, and a squadron of Italian built Ansaldo A.300 general purpose machines based at Titwan. It is also worth noting that observation balloons were still used during the retaking of Nador, Zilwan and Monte Arruit.

The first use of gas weapons by the Spanish was reported in a French language newspaper in Morocco on 27 November 1921 but, although the substantially re-equipped Spaniards did regain some territory, they were unable to achieve a decisive victory. On the other side, Abd al-Karim's support base continued to expand.

One of the SIAI (Società Idrovolanti Alta Italia) S.16 bis purchased for the Spanish Navy's Aeronáutica Naval. Three of these Italian flying boats formed the Group Hydro operating from the Sibkha Abu Ariq or Marshika lagoon (Mar Chica in Spanish) in 1922, under Capt. Blanco Santiago. (Archivo Historia del Armada Española)

TABLE 1: AVIATION UNITS IN THE SPANISH PROTECTORATE

GROUP	LOCATION	TYPES	COMMANDING OFFICER
Group 1	Titwan	Two squadrons of Breguet XIVs	Capt. Pastor Velasco
Group 2	al-Arash	Two squadrons of Breguet XIVs	Capt. Matanza Felipe Vazquez
Group 3	Melilla	Three squadrons of DH.4s	Capt. González Gallarza
		Two squadrons of Bristol F.2Bs, DH.9As and Martinsyde F.4s	Capt. Moreno Abella
Group Hydro	Mar Chica lagoon/ Sibkha Abu Ariq	One squadron of Savoia S.16s	Capt. Blanco Santiago

So, in January 1922 the Spanish air units in Morocco received authorisation for a more aggressive campaign, intended punish the "rebels" by hitting a wider range of often non-military targets.

The following month a second squadron of highly effective Breguet XIV bombers replaced the Ansaldos at Titwan, followed during the summer by an additional Breguet squadron at al-Arash and a unit of Martinsyde F4 Buzzards at Melilla. However, February 1922 also saw Abd al-Karim's forces attacking the Peñón de Vélez de la Gomera, a tiny Spanish-held island (now an isthmus connected to the mainland by a sandy beach), which remains Spanish territory to this day. So Spanish aircraft from outside Melilla bombed the Rif positions threatening the Peñón, then flew on to refuel and rearm at Titwan. These aeroplanes then bombed the same targets on their return flight to Melilla.

Spanish air strength continued to grow in northern Morocco, with the arrival of three Savoia S.16 flying boats from Los Alcazares, which had been Spain's first naval aviation base back in 1915. By April the units shown in Table 1 were based in the Spanish Protectorate, and most would remain there until the end of the Rif War.

In addition to the threat posed by Abd al-Karim and the Rif Republic in the east and centre of the Spanish Protectorate, Mulay Ahmad al-Raisuni was still causing difficulties for the Spaniards further west. In fact, raids by the DH.4 bombers based at Titwan and al-Arash seem to have contributed substantially to al-Raisuni's decision to negotiate with Col. José Villalba Riquelme in September 1922. Al-Rausuni was also jealous of Abd al-Karim's popularity and success; this contributing to his subsequent decision to join forces with the Spanish, thereby hoping to control north-western Morocco following a Spanish victory.

A Spanish Bristol F.2B in flight over northern Morocco. The pseudo-civil registration had by now been removed to be replaced by a broad white band around the fuselage. (Archivo Historia del Ejercito del Aire)

The year 1922 saw the Spanish Navy's ship *Dédalo* entered service in April. She had been converted from an airship and balloon tender called *España No. 6* into a seaplane tender and renamed. As such she carried the Naval Aeronautical Division with six flying boats of three different types (two Felixstowe F.3, two Savoia S.16, and two Macchi M.18). The *Dédalo* was also home to the Italian made dirigible airship *S2* and a captive balloon, though she could theoretically carry even more. According to some accounts, the *Dédalo* currently had the usual two Felixstowe F.3, two Savoia S.16, and two Macch M.18 flying boats, though other sources state that she carried four S.16s, perhaps one or more Savoia S.13s and no F.3s.

Accompanied by two torpedo boats, the *Dédalo* arrived in Ceuta in northern Morocco on 3 August. Though also intended for air-sea rescue work, her aeroplanes bombed suspected Rif positions close to one of the beaches in Al Hoceima Bay three days later. The *Dédalo* would continue to support the Spanish Army's coastal operations until mid-November, when she returned to Spain. By that time the efforts of her airmen, technicians and sailors had already been recognised in a Royal Decree of 15 September 1922, granting the Spanish Marine Aviation Corps its own flag.

The struggle remained fierce. In late May and early June Spanish aeroplanes were particularly busy. On 5 June machines from both the Melilla Groups, plus a squadron from Titwan, attacked a new enemy encampment near Tafersit, in the mountains almost midway between Melilla and Al Hoceima. This they did from very low altitude and thus came under heavy ground fire, sometimes from enemy marksmen on surrounding hills who could shoot down on the aeroplanes from above. Almost every machine was hit in its wings or fuselage and the famous Lt. Col. Captain Don Alfredo Duani Kindelán, Commander of the Spanish air units in Morocco who was flying as observer to pilot Capt. Lorente, CO of the 2nd Squadron, was badly wounded.

Elsewhere in June the Rifians shot down a Bristol F.2B, capturing its crew. The downed aeroplane was then destroyed by bombs from other Spanish machines. This sort of flying was difficult and would result in significant losses to aeroplanes and crew. Flying so low meant that the ground rushed past too quickly for observers to make accurate observations, while flying high enough to be photographed from beneath by a colleague in another aeroplane was regarded as shameful. Not surprisingly, several Spanish airmen were awarded the Military Medal for their role in this battle, including Luis Moreno Abella, Saéz de Buruaga, Rafael Lorente and Mariano Barberán.

Next came the struggle to lift the siege of Tifaruin (Tifarouine) on 15-22 July. This operation again included low level attacks against Rifian forces, as well as dropping supplies to the besieged garrison.

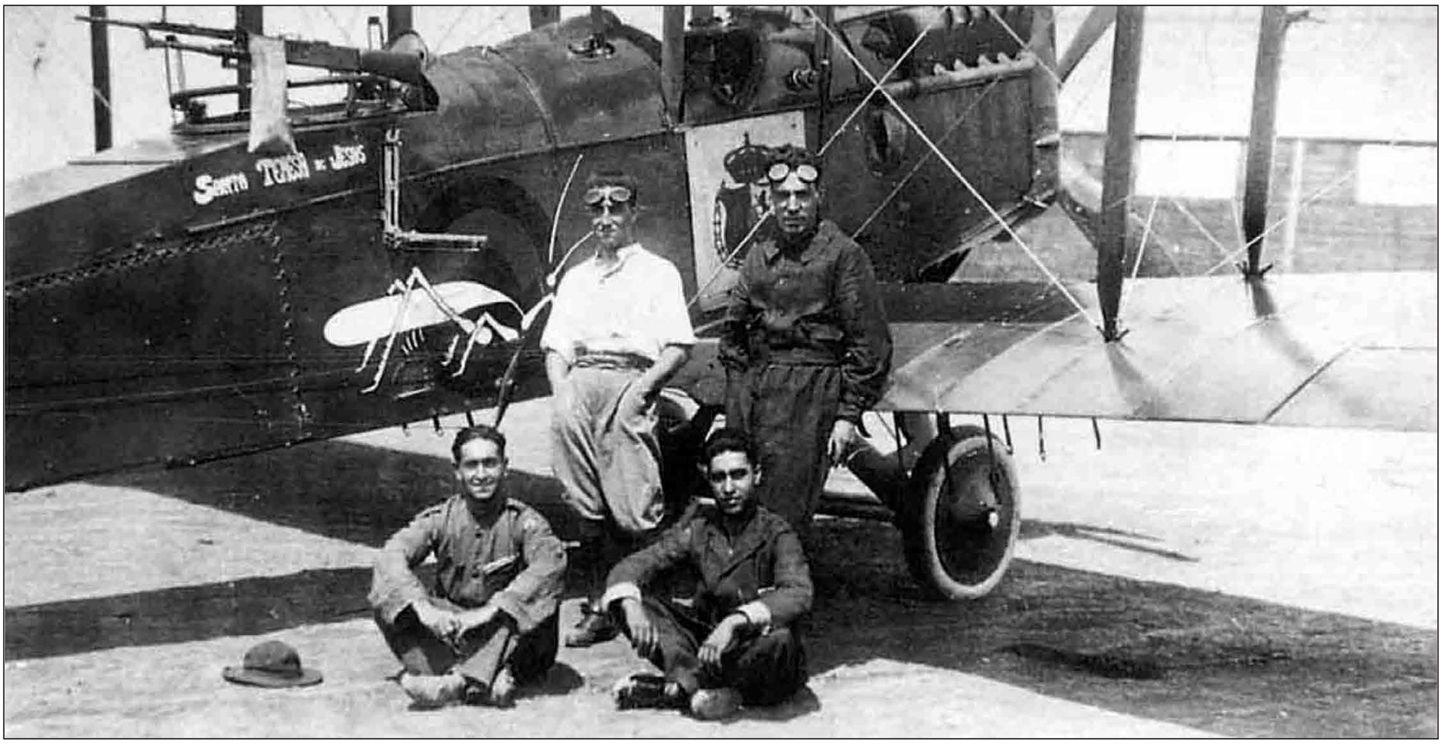
It also cost the lives of two aircrew, shot down on 20th and 22 July. Four of their more fortunate colleagues were subsequently given the Military Medal. A few days later, on 26 July, another observer, Lt. Ramón Ciria Lopez, was mortally wounded. Nevertheless, bombing sorties continued from al-Arash and Titwan. Towards the end of July, the wounded Lt. Col. Kindelán was replaced by Col. Jorge Soriano as commander of the Spanish Air Force in Morocco. On 3 November 1922 a Royal Order granted the Military Medal collectively to the Melilla Squadrons for their work from 29 June 1921 until 29 September 1922. Meanwhile on the ground, a cautious Spanish advance continued during October but in the middle of November the Spanish government called a halt, having regained the territory lost after the disastrous Battle of Anwal.

The Spaniards found the Breguet XIV to be a reliable and effective bomber, so in 1923 the Spanish government sought to purchase a number of more modern Breguet XIX light bombers, as well as obtaining a licence to build 20 Dutch Fokker C.IVs. However, as delivery of the first and construction of the latter was so delayed, twelve Potez XVs were bought along with the same number of now out-dated British Bristol F.2Bs. Meanwhile the Aeronáutica Militar workshop at Cuatro Vientos were instructed to build two prototype AME VIs, designed by Manuel Bada Vasallo and Arturo Gonzales. The AME VI was, in fact, a considerably modernised version of the British Bristol F.2B Fighter. Twenty AME VIs were eventually built though they did not enter service until 1925. The first supplies of mustard gas also apparently arrived from Germany (where its production had supposedly been prohibited under the Treaty of Versailles) during 1923.

Spanish military thinkers were amongst those who expressed their ideas on air power during the 1920s. Captain Don Alfredo Duani Kindelán was one, and he naturally focussed upon the role of air power for a middle-ranking military power like Spain, especially when facing what were still known as “colonial revolts”. In particular, Kindelán recognised that mountainous Morocco was not like the extensive plains and deserts of Iraq where the British RAF would play the role of aerial policemen almost on its own (see Chapter 7). He therefore maintained that, in an arena such as the Rif Mountains, aeroplanes had to serve in direct and close cooperation with troops on the ground. Alfredo Kindelán was also very concerned to minimise losses amongst Spain’s limited pool of technically educated aircrew, as well as reducing losses of increasingly expensive aeroplanes. Spain was at the time still a relatively poor and, in some respects, an educationally backward country when compared to its closest European rivals.

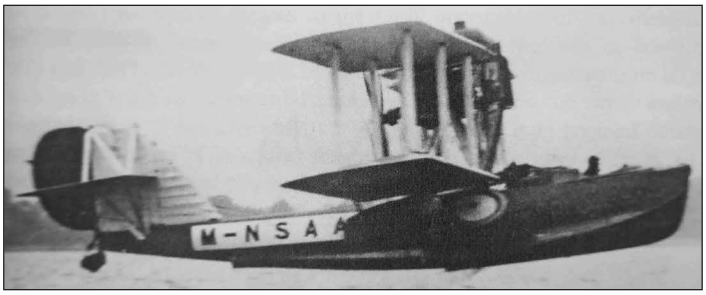
Gen. Miguel Primo de Rivera, who had seized control of the Spanish government on 23 September 1923, also took command of operations in the Spanish Protectorate in northern Morocco. On 10 July 1924 he flew to see the situation for himself in a Spanish Naval Dornier Do J Wal flying boat. (Private collection)

Relative peace appeared to have been achieved in the Spanish Protectorate by 1923, but this remained unstable, as was the political situation in Spain itself. On 28 May Capt. Mariano Barberán, commander of No. 1 Sq., undertook a reconnaissance in his Bristol F.2B, confirming that Abd al-Karim’s forces were massing for a new offensive. This was quickly confirmed by photographic reconnaissance and the storm broke shortly afterwards. Nevertheless, the “Rifian” assault failed, partly as a result of intensive raids by

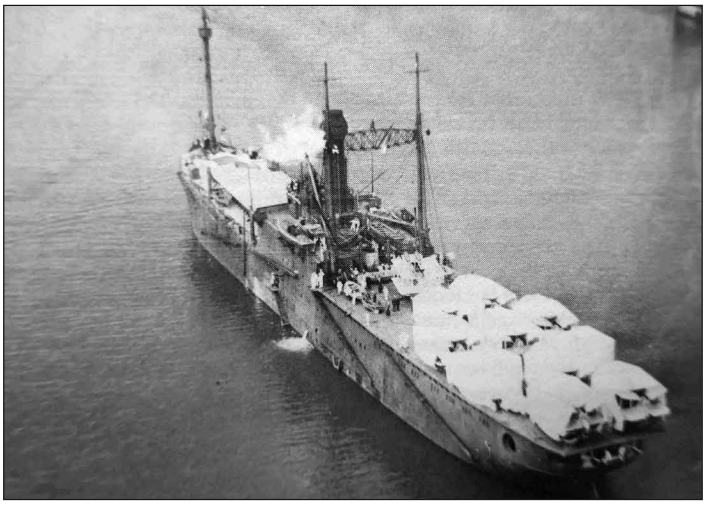


A Rolls-Royce powered De Havilland DH.4 of the 3rd Escuadrilla in 1927, with the unit’s distinctive grasshopper insignia on the fuselage. Spanish “Rolls” De Havillands had first been sent to northern Morocco in January 1920. (Archivo Historia del Armada Española)

A Breguet XIV of the Aeronáutica Española photographed in northern Morocco, supposedly in 1924. The location suggests that it might have made an emergency landing. (Sanchez Mendez archive)



The first Supermarine Scarab to be built for the Spanish Navy, with the pseudo-civil registration M-NSAA, taking off or landing prior to delivery late in 1924. (Archivo Historia del Armada Española)



The Spanish Navy's seaplane carrier *Dédalo* leaving British waters for Spain with newly delivered Supermarine Scarabs crowded onto her after deck. They are under tarpaulins with their wings folded because the lift which was supposed to take them down into the ship's hold was too small. (Archivo Historia del Armada Española)

A pair of Loring R.III reconnaissance aircraft in flight. One hundred and ten of these aeroplanes were ordered by the Spanish government in April 1927. (Sanchez Mendez archive)

Spanish aircraft operating from the new aerodrome south of Melilla. On the Spanish side, one aeroplane was lost along with its crew, while several others were downed although their crews escaped and the machines were subsequently recovered.

In September 1923 Gen. Miguel Primo de Rivera headed a military coup in Spain, winning support from King Alfonso XIII and the Army, promising to end corruption and "regenerate" the country. Although this coup was effectively bloodless, worse would follow in 1936. For the present, however, Primo de Rivera suspended the Spanish constitution while imposing martial law and censorship.

Before his coup and his assumption of the position of Prime Minister, Gen. Primo de Rivera had twice suggested that the Moroccan Protectorate be abandoned as not worth the blood and treasure which Spain could ill afford. Having apparently been one of the so-called *abandonistas*, Primo de Rivera now felt that he depended upon the opposing *africanistas*, including many officers who had fought in Morocco, to remain in power. Efforts were made to reach an agreement with Abd al-Karim in October and Prime Minister Primo de Rivera, as he now was, attempted a policy of "semi-abandonment". This meant giving up the reconquest of the mountainous interior while concentrating Spanish strength along the coast, behind what became known as the Primo Line.

For a while this new policy seemed to work, but it rapidly proved to be an illusion. One of al-Raisuni's leading supporters went over to Abd al-Karim and together they planned a new and far more ambitious uprising, not only against the Spanish but also against al-Raisuni and the somewhat nominal Moroccan Sultan in Fez. This would bring the Rif Republic into direct confrontation with the French. Meanwhile, on the Spanish side, there had been several changes in senior command, some of which were not supported by many Spanish airmen.

Apparently believing that there was no immediate threat in the Spanish Protectorate, Spain's focus shifted to opening up air routes and establishing air-bases for both land and maritime aircraft along the Atlantic coast of Spain's other huge protectorate in north-west Africa. This was the Spanish Saharan Territory or Western Sahara. The plan was to secure a safe air route from al-Arash (Larache) in northern Morocco to Tenerife in the Canary Islands. Capt. Felipe Diaz Sandino was to carry out a survey, using three Breguet XIVs and a German-built Dornier Do J flying boat. Usually known as a *Wal* or "whale", the latter type would later be designated as the Do 16. The Breguets' flight was to be carried out in six stages, starting from al-Arash and ending at Arico on the island of Tenerife on 30 January. Meanwhile the Dornier Wal would set off from outside Melilla on 13 January, then fly via Casablanca and Lanzarote before returning to Melilla on 16 February. This enterprise was an undoubted success and showed that air corridors could be established between mainland Spain and its most distant provinces.

Meanwhile Abd al-Karim had his sights set elsewhere, hoping that the Rif Republic could have a small air force of its own. On 1 March the airmen at Tauima, just south of Melilla, learned that Abd al-Karim's representatives had purchased at least one aeroplane from a French source. So the Spaniards were determined to destroy this machine, which they managed to do after considerable effort (see Volume Four of this mini-series).

Of more immediate importance for the Spanish, was a new offensive launched by the Rif Republic in May 1924. This time the Spanish Air Force was taken by surprise. Primo de Rivera promptly ordered the transfer of the greater part of Spain's air power in Africa to Melilla and also prepared to withdraw Spanish forces to more defensible areas. The new Rifian offensive was directed not only at the area around Melilla in the east, but also in the western part of the Spanish Protectorate, across the Wadi Lau (River Lau). As a result Shafshawan (Xauen) would remain under the control of the Rif Republic from 1924 until 1926. On 10 July 1924, Prime Minister Gen. Primo de Rivera came to see the situation for himself and found that there was still widespread opposition to abandoning the Spanish Protectorate.

Meanwhile the mostly inexperienced pilots of the Breguet XIV squadron based outside Melilla were sent to Titwan to protect vulnerable Spanish Army convoys; one of the aircrews being killed during such a mission. Nevertheless, the young fliers from Melilla seem to have learned fast, though Capts. Eduardo González Gallarza and Mariano Barberán were injured. Also wounded on 21 August was Sgt. José Maria Gomez del Barco who continued his mission and thus became the fifth man from the air service to earn the Laureate Cross of San Fernando. Four days later the Spanish carrier *Dédalo* arrived at Ceuta from England with twelve new flying boats on board. These were modern Supermarine Scarab amphibians, military versions of the Supermarine Sea Eagle, which had been ordered in February 1924. Completed that same year, they were given the pseudo-civil registrations M-NSAA to M-NSAL. As mentioned above, M indicated Spain and N indicating Naval, with S for ship, A for amphibian and final letter being the machine's individual code.

One had already been damaged in a collision with a Union Castle liner in Southampton Water when taking off, the pilot never before having flown such a large machine. The newly modified Spanish seaplane tender, *Dédalo,* arrived to take delivery of the Scarabs but due to a design error the lift which was to lower the folded aeroplanes into the ship's hold proved to be very slightly too small. As a result, the twelve amphibians were tied down, side by side, on the after deck, under tarpaulins and with wings folded.

Their delivery was nevertheless marred by serious damage to five Scarabs. According to some sources a storm blew them overboard on the very night that *Dédalo* reached Morocco. A different version maintains that they were damaged when the ship ran into heavy seas in the Bay of Biscay while sailing from England to Spain. What is clear is that the survivors quickly started flying patrols in pairs around the lower reaches of the Wadi Lau.

Known to Spaniards as "The Bloody Days", September 1924 was a hard and costly period for Spanish aircrews, several of whom were lost. They included several senior men, Capt. José Carrillo, commander of the Group, being killed on 28 September 1924 along with his air-gunner. Carrillo's usual observer, Lt. Angel Lopez Orduña, with whom he had taken part in the destruction of one of Abd al-Karim's aeroplanes back in March 1924 (see Volume Four), had been killed a fortnight earlier. Orduña also appears to have been posthumously promoted from the rank of Teniente to that of Capitan. Speaking in 1948, Alfredo Kindelán (by then a strong critic of Gen. Franco but still a staunch monarchist) maintained that: "Carrillo was the most gifted man to serve in the Spanish Air Force".

On 19 September the flying units at Ceuta were reinforced by the arrival of a squadron of six Savoia (SIAI) S.16bis flying boats, but one was soon forced down by enemy fire close to the mouth of the Wadi Tiguisas, east of Shafshawan (Xauen). The crew fought back as Rifian troops tried to capture their machine and as a result naval observer Lt. Jorge Vara Morlan was killed. He was the only member of the Spanish Naval Air Service to fall in action during the Rif War. Thereafter the *Dédalo* and its flying boats remained at Ceuta until 17 November, when they were recalled to Spain and the Group was dissolved. By autumn 1924 the Breguets at al-Arash and Titwan were worn out, but many weeks passed before they could be replaced by a Squadron of Fokker C.IVs under Capt. González Gallarza. These Dutch designed machines had been built under licence in Spain by the Loring Company.

In the early summer of 1925 the Spanish government purchased several Avro 504Ks from the British Aircraft Disposal Company. They were said to be for the Aeronáutica Naval's flying training school, though this example was photographed at the Zaragoza Flying School with members of the 10th graduation class. The fuselage again has a long white panel bearing a pseudo-civil registration which the British authorities insisted be applied to military aircraft sold to Spain. (Museo del Aire).

The rest of the first series of 20 Fokker C.IV machines was completed by spring 1925. By then, however, Eduardo Barrón was already working on new projects for the Loring Company, the first to come to fruition being the Loring R.l, a two-seater reconnaissance and light bomber. This was successful enough for the Spanish government to order 30 aeroplanes and by June 1926 a squadron of them had been sent to Titwan in northern Morocco. Other designs would follow, including the Loring R.III of which no less than 110 would be ordered by the Spanish government in April 1927. By then, of course, the Rif Republic – or "Rif Rebellion" – in northern Morocco had collapsed.

Meanwhile the war in Spain's still somewhat nominal Moroccan Protectorate continued. Indeed, October 1924 had seen Spanish airmen particularly busy, and suffering occasional losses as a result. It even seems that the opposing Rifian warriors could ambush aircraft by luring them into attacking positions in deep and narrow valleys, enabling Rifian marksmen to fire downwards from the slopes onto aeroplanes that were flying beneath them. Rather than withdrawing from parts of the Protectorate, Primo de Rivera agreed that approximately 30,000 troops must be sent to new fortified positions south of Titwan during October and November 1924. Although, this meant abandoning much of the rest of the western part of the Spanish Protectorate, consolidating its strength along a shorter and more defensible front may have helped the Spanish avoid a second disaster like that at Anwal in 1921.

During the intense operations of this period, Staff Capt. Ramon Ochando Serrano was seriously injured while flying as observer in a DH.9 that was covering the evacuation of two untenable forward positions. Serrano died of his wounds over a month later and was posthumously awarded the Laureate Cross, becoming the sixth man in the Spanish Air Force to receive this medal. Other aircrew were also wounded by intense and accurate ground fire during such dangerous sorties. In December the old and worn out Breguet XIVs were finally joined by the first Fokker C.IVs built by Loring in Spain. The latter were led by Capt. Eduardo González Gallarza. On 12 and 13 December Shafshawan itself was evacuated, and once again the aeroplanes had to provide close cover during a difficult withdrawal through mountainous terrain to Titwan.

Back in Spain the demands of the war in Morocco during the difficult year of 1924, resulted in intensified aircrew training and a new emphasis on domestic aircraft production at Cuatro Vientos, with the AME IV type now being produced in significant numbers. Four Avro 504K training aeroplanes were also purchased for the Spanish Royal Naval Air Service from the British Aircraft Disposal Company. They were handed over to Captain Cortijo of the Spanish Royal Naval Commission by Major D. Stewart, the Aircraft Disposal Company's sales manager early in the summer of 1925. Unfortunately, the Avro 504Ks had to be almost entirely rebuilt at Cuatro Vientos, alongside Martinsydes F4 Buzzards and Breguet XIVs. Meanwhile a number of Macchi M.18 flying boats were being constructed for the Spanish Naval Air Service.

Gen. Primo de Rivera, having previously announced that he opposed a new offensive against the Rif Republic, now came to the conclusion that the quickest way to end the war without a complete climb-down by the Spanish side, would be to land an army in Al Hoceima Bay. From there a rapid advance inland would seize the nearby Rifian capital of Ajdir. Planning for this ambitious assault therefore began secretly in 1924.

Whether the similarly ambitious but more public long-distance flight by Capt. Barberán and his crew of Artillery Captain Joaquin Ruiz de Alda and mechanic Pablo Rada in January-February 1925 was in part a diversionary tactic in unknown. It was nevertheless a clear demonstration of Spain's continuing presence at the forefront of aviation technology. So, on 22 January, a Dornier flying boat took off with a new direction-finding device on board, flying from Palos de la Frontera near Huelva in southern Spain to Las Palmas on Gran Canaria island. On 26 January this Dornier reached Porto Praia in the Cape Verde Islands.

Four days later Barberán and his crew took off on the most difficult stage of their journey. In fact their take-off proved difficult because of rough seas and the additional fuel needed to cross the Atlantic but, after flying for 12 hours and 40 minutes across 2,035kms of ocean, they reached the Brazilian island of Fernando Noronha. The following day Capt. Barberán and his crew continued their flight to Recife, which they reached safely despite now only having one working engine. After further stops at Rio de Janeiro and Montevideo, the Dornier flying boat arrived as its final destination of Buenos Aires on 10 February 1925.

The following month, the Spanish Navy and Army, supported by their respective air arms, carried out a naval landing in the Anjra (Anyera) area behind the Spanish defensive line in northern Morocco. This was more than merely a practice run for the major assault at Al Hoceima because it convinced the Anjra tribe not to threaten the Spanish rear. Originally planned for 25 January 1925, the assault was delayed until 29 March due to bad weather. On that day the landing area was bombed and strafed by Spanish aeroplanes, while also being shelled by the Spanish Navy. On the 30th, the landing assault started at 01.00 hours. The vanguard units reached the beach on board six barges and almost immediately overwhelmed the local tribesmen. The Anjra abandoned the struggle and the operation was declared a complete success, as were mock landings at Ceuta and Melilla.

The operation at Anjra also taught the Spaniards that speed was the key to success. It was decided that, at Al Hoceima, the initial landing would not be on the exposed main beach but would be outside the bay. In fact, it would be close to the peninsula which marked the western end of Al Hoceima Bay. The two landing sites would then be linked to form one beachhead. A target date was to be 7 September 1925. Even more important in strategic terms was the French government's decision that the success of Abd al-Karim and the Rif Republic now posed a threat to the French Protectorate (see Chapter 3).

An aerial photograph of the besieged Spanish position at Kudia Tahar, which was regarded as key to the Spanish defence of Titwan during September 1925. (Sanchez Mendez archive)

Abd al-Karim had, in fact, taken the initiative in this confrontation by launching an offensive against French outposts in northern Morocco on 13 April 1925. This proved so successful that Rifian "insurgents" and their supporters almost reached the gates of the Moroccan capital of Fez. Though not as great a military disaster as the Spanish defeat at Anwal, a Rifian offensive into the French Protectorate caused Marshal Lyautey to resign as the French Resident General in Morocco. Instead Marshal Petain, the hero of the Battle of Verdun, was put in command of military affairs in the country. On 18 June Petain reached an agreement with the Spanish government in Madrid for a joint campaign to crush the Rif Republic, and a few days later, on 7 July, Marshal Petain became the French Resident in Morocco in place of Lyautey.

Back in northern Morocco, the area around Al Hoceima was regarded by both the Spanish and French as the heart of what they insisted on calling the "Rif Rebellion". Some military historians also regard the Spanish landing as a predecessor to the far larger D-Day Landings of the Second World War. It was certainly daring and modern in conception. Gen. Ignacio Despujols and a team of staff officers with experience of Morocco had been placed in charge of planning the operation. Over 18,000 men would take part, almost a fifth of them being from the Spanish Foreign Legion, while many others were local Moroccan troops in Spanish service. There would also be a battalion of Spanish Marines from the Tercio de la Armada. Two columns would meanwhile advance from west and east, from Spanish-held territories around Titwan and Melilla. The western force would include a company of twelve Renault FT-17 light tanks, though the transport elements in both western and eastern columns still relied almost entirely on mules.

The Spanish Navy provided the battleships *Jaime I* and *Alfonso XIII* to support the landing, along with the flying-boat tender *Dédalo* (with a new Caquot Type D type observation balloon on board), five cruisers, three destroyers and many gun boats. The French sent a battleship, two cruisers and four smaller ships which would join the Spanish vessels outside Al Hoceima Bay. Meanwhile Spain had secretly purchased 26 Type K Landing Barges from the United Kingdom in 1922; these being the same type of vessels that had been used in the Gallipoli Landings of 1915. They may even have included survivors from that disastrous campaign.

Three hospital ships, the *Villarreal, Andalusia* and *Barcelo* would provide 350 berths to transfer wounded back to Algeciras and Malaga. Meanwhile the columns advancing overland along the coasts from east and west would be supported by smaller naval detachments, largely to provide transport. General and Prime Minister Primo de Rivera would be in supreme command; the naval forces being commanded by Spanish Admiral Yolif and French Admiral Hallier, the landing forces by Gen. Sanjurjo y Sacanell, and the air units by Gen. Jorge Soriano.

Spanish Military Aviation could theoretically have mustered 300 aeroplanes around Melilla but lacked the technical workshops to keep such a large force operational. So, it was decided to employ a smaller number while retaining a reserve on the Spanish mainland. Meanwhile, a decision to withdraw the old De Havillands from Morocco to Granada had been reversed because almost every airworthy machine was needed. The Group at Melilla was similarly reorganised and now had support from a squadron of Farman F.60 Goliath heavy bombers, each capable of carrying 150kgs of bombs.

A French Farman F.60 Goliath, powered 375hp Lorraine 12D engines, had so impressed the Spanish when demonstrated at Cuatro Vientos in February 1923 that this machine was promptly purchased and sent to the Spanish Air Force aerodrome outside Seville in April. At least two more Goliaths were subsequently bought, the men and machines of the resulting bomber squadron rotating between Seville and Melilla. According to military aviation historian Gen. Hidalgo de Cisneros, he himself dropped the first 100kg mustard gas bomb from a Farman F.60 Goliath during the summer of 1924, these bombs having been transported to Melilla before their use by the Goliath heavy bombers.

In fact, the number of aeroplanes used in the forthcoming offensive was about twice that previously used anywhere in Spanish Morocco, eventually totalling 136 Army machines, 18 Navy flying boats, supported by six French aeroplanes, plus two donated by the Spanish Red Cross to evacuate seriously wounded men. The majority would operate from the Melilla area, while only 42 would operate from Titwan and al-Arash. It is worth noting that a small number of these machines were fighters because the Spaniards still feared that Abd al-Karim had acquired aeroplanes of his own.

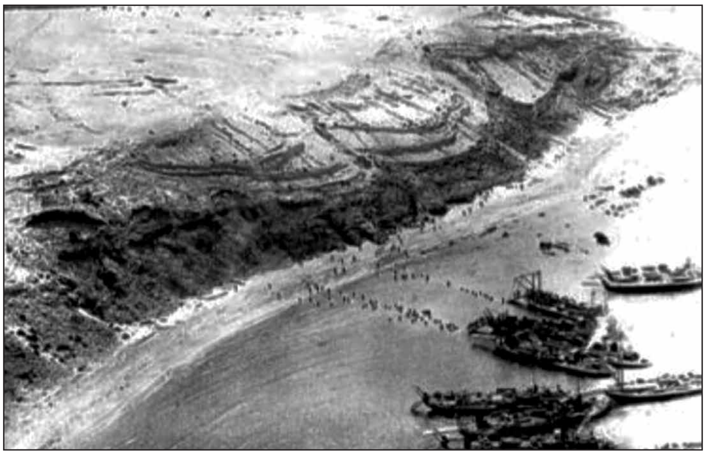
The Moroccan Rifian troops facing these formidable forces included a regular army, very different from the old-style tribal harka war-bands which had been largely responsible for defeating the Spaniards back in 1921. The army of the Rif Republic was now uniformed, regularly paid and had a clear, unified command structure. It was also relatively well armed, not only from captured weaponry but also with modern rifles and artillery. Some of the latter had been purchased in the International City or Zone of Tangier at the northern tip of Morocco. This Zone had been under joint French, British and Spanish administration since a convention was signed in Paris on 18 December 1923. As a consequence, Tangier was considered to be both neutral and demilitarised. However, the Rifian regular army was small and so Abd al-Karim still had to rely on traditional tribal harkas. Abd al-Karim also had ten batteries of artillery, four with relatively heavy guns, plus a number of European mercenaries and defectors from both Spanish and French forces.

By September 1925 it was clear that Al Hoceima Bay would be the target of a major Spanish assault. The number of men available to protect this bay and the nearby Rifian capital of Ajdir is believed to have been around 8,000, the greater part of whom were arrayed to defend beaches inside the bay. Facing the Spaniards' chosen landing area were some 1,000 men, several machine gun positions and three artillery batteries. Meanwhile, Abd al-Karim tried to divert his enemy's focus by launching an offensive toward Titwan on 3 September, reportedly claiming that: "if they (the Spaniards) land at al-Husaymah, I will take Titwan". Abd al-Karim's move was merely a diversion, and it failed in its primary purpose while at the same time weakening Rifian forces defending Al Hoceima and Ajdir. Nevertheless, on 3 September 1925, a Spanish frontline position at Kudia Tahar, on the road from Shafshawan to Titwan was seriously threatened and the Spanish training squadron of Breguet XIVs was rushed from Melilla to help. Over the next few days, aeroplanes based at Titwan and al-Arash played their part in stopping this attack which was, in fact, abandoned on 13 September.

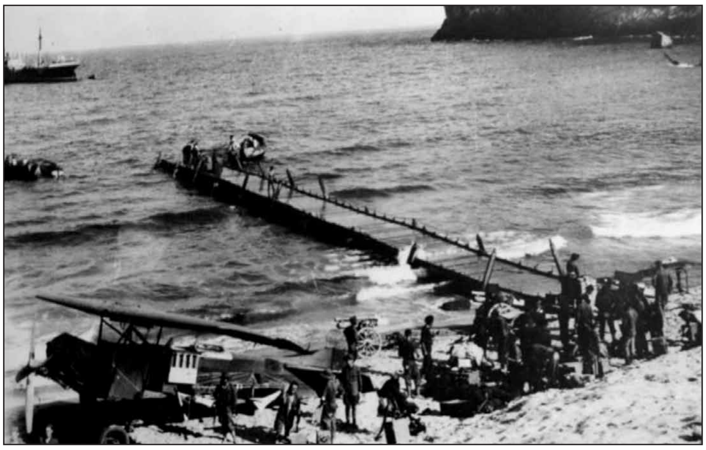
Meanwhile, frequent low-level flights were made over Al Hoceima. The Farman Goliath squadron at Melilla began bombing from greater altitude, usually around 1,000 metres, which was far beyond effective defensive fire. Similarly, there was an intensive photographic survey of the bay's defences, along with neighbouring territory up to 15kms inland and the terrain over which the crews would have to fly from Melilla, Titwan and al-Arash. In contrast, an earlier plan to establish a fixed observation balloon position on a tiny island called the Peñón de Alhucemas in the bay of Al Hoceima was abandoned because it was too close to the shore. Instead the Spaniards decided to use an observation balloon tethered to the battleship *Jaime I,* with observers drawn from both the Army and Navy. Thus, Spanish records shown that, on 1 September 1925, the air units ready to support the assault on Al Hoceima consisted of those shown in Table 2:

TABLE 2: SPANISH AIR UNITS SUPPORTING THE ASSAULT ON AL HOCEIMA
Director General of Aeronautics: Gen. Jorge Soriano
First Sq. (Lt. Col. Abilio Barbero)
First Group at Titwan (Comm. Luis Riano Herrero) with two squadrons of Breguet XIV
Second Group at al-Arash (Comm. Luis Romero Basart) with two squadrons of Breguet XIV
Second Sq. (Lt. Col. Alfonso Bayo Lucia)
Third Group at Melilla (Comm. Joaquin González Gallarza) with DH.9, Potez 15 and DH.4
Fourth Group at Melilla (Comm. Fernandez Mulero) with Bristol F.2B
Third Expeditionary Sq. (commanded by Lt. Col. Alfredo Kindelán)
Fokker Group at Melilla (His Highness Don Alfonso de Orleans y Borbón) with Fokker C.IV
Breguet Group at Melilla (Cap. Felipe Diaz Sandino) with Breguet XIX-2. (recently arrived from training)
Independent Unit: Fighter Unit at Melilla, with Nieuport 29 C-1
Flying Boat Group at Atalayon naval air station, Melilla (Comm. Ugarte) with Domier Wal and Savoia S.15 bis
Naval Aviation (Lt. Taviel de Andrade) with Macchi M.18 (or M.24)
Dédalo mother ship (Comm. Cardona) with Supermarine Scarab, Savoia S.16bis, dirigible airship and captive observation balloon
Heavy bomber squadron (Lt. Paris) with Farman F.60 Goliath
Balloon Regiment [one company] (Capt. Ortiz Zarate)
Air Casualty Evacuation Flight, Red Cross, with Junker F-13

Considerable effort was put into developing effective methods of rescuing aircrew who might come down in enemy territory. Most such operational flights would be close to the Mediterranean coast, so that was where rescue preparations were concentrated. An auxiliary vessel from the flying-boat base at Atalayon outside Melilla would carry additional fuel, bombs and ammunition for the flying boats and would itself be stationed just outside Al Hoceima Bay. It



This remarkable aerial photograph shows the Spanish beach assault at Al Hoceima on 8 September 1925. (Archivo Historia del Ejercito del Aire)



A Fokker C.IV photographed on the beach at Al Hoceima was presumably the machine which had been forced down by Rifian groundfire, though without injury to its crew. It came from the Fokker Group based at Melilla, commanded by His Highness Don Alfonso de Orleans y Borbón, the heir to the Spanish throne, and was been retrieved by Spanish troops. (Archivo Historia del Ejercito del Aire)

would similarly act in close association with the flying-boat tender *Dédalo*, enabling the latter to undertake offensive operations.

As the day of the Spanish offensive approached, aircrews were given more detailed orders. These initially focussed upon the necessity for aeroplanes to maintain intensive bombing and strafing of the actual landing area prior to troops hitting the beaches, and then to hamper the approach of enemy reinforcements. At sunset on 5 September, Spanish ships sailed from Ceuta towards the Wadi Lau, while both Spanish and French warships sailed from Melilla towards Sidi Dris, with the apparent intension of punishing “rebel” groups. This was, of course, an attempted diversion, as were attacks on these areas the following day. The latter included landings on three beaches by two units of Spanish Foreign Legionaries. Late on 6 September both forces broke off their actions and headed for Al Hoceima Bay. Meanwhile the flying boat tender *Dédalo*, which had been based at Algeciras since 11 June, also headed for Al Hoceima.

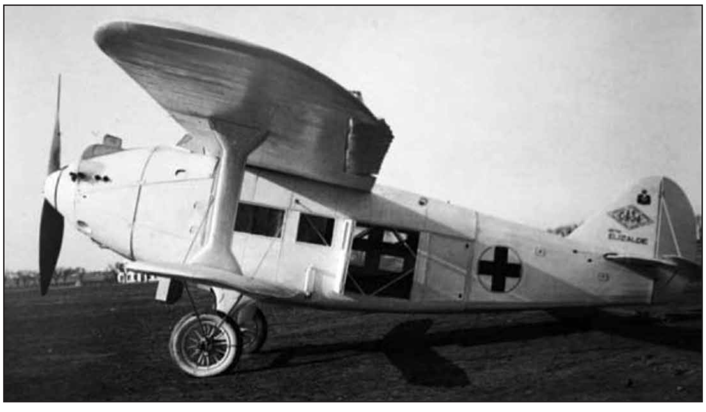
The *Dédalo* and the flotilla from Ceuta joined forces outside the bay late on the 6th, but a planned landing next day had to be postponed due to bad weather and the Spaniards lost some element of surprise, as the landings would not take place until 8 September. Under the overall command of Gen. José Sanjurjo y Sacanell, the landings were preceded by the warships’ bombardment, directed in part by a French observation balloon. Two hours later 75 Spanish aeroplanes began bombing and strafing the enemy’s defensive positions. The first attacks were carried out by Fokkers and De Havillands. These were followed by other machines until some observers claimed that the surrounding hills were swamped by fire and smoke. Enemy fire was also intense, bringing down one De Havilland and a Dornier flying boat, though both crews were rescued.

Spanish troops then came ashore close to the western point of the bay between 0830 and 1600 hours, though not without problems. Barges carrying light tanks and artillery had to fall back, having hit a shoal of unexpected shallow water. The others pressed ahead to disgorge the Legionaries and Moroccan troops under Spanish command, though the men still had to wade the last 50 metres. Fire support could only come from the warships, but no enemy reinforcements were seen approaching and the majority of Rifian defenders remained facing larger beaches within the bay where Abd al-Karim seemingly remained convinced the main blow would fall.

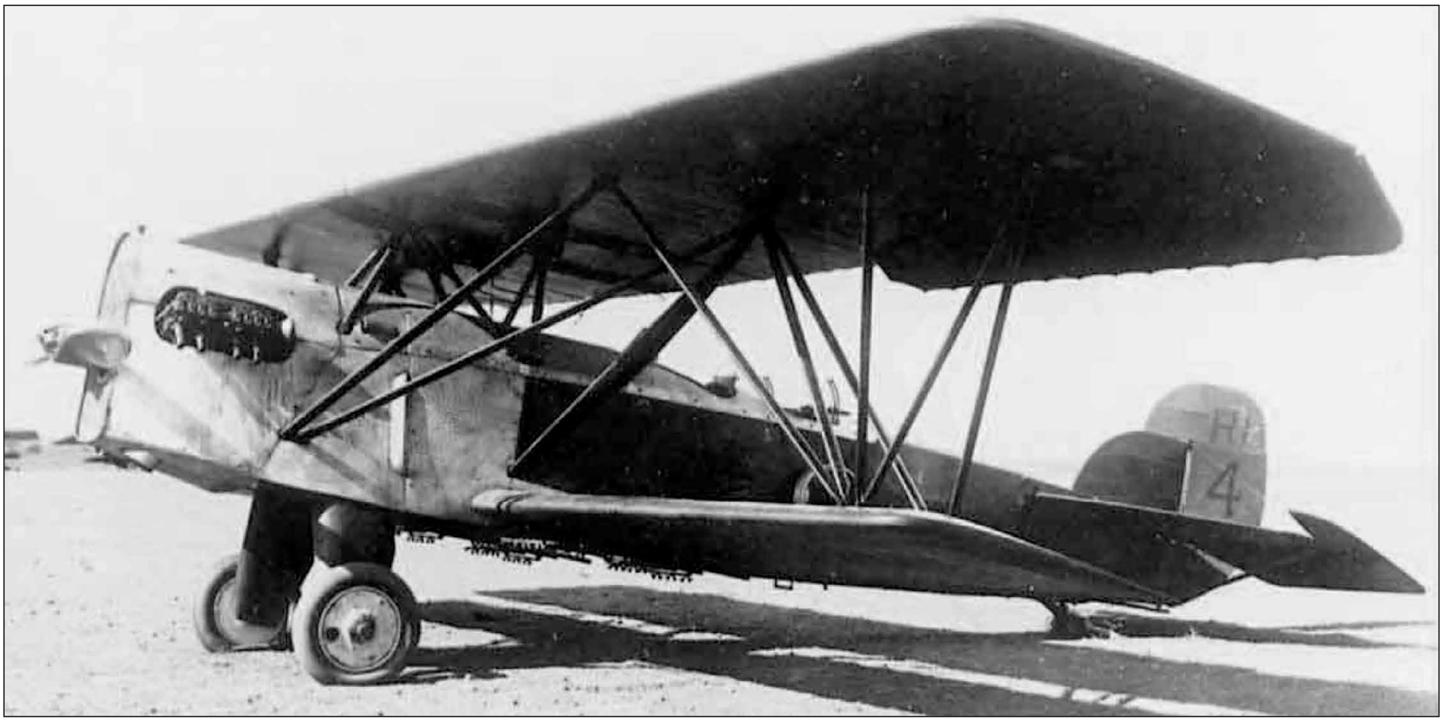
The Foreign Legionaries now advanced on the right flank, with Moroccan soldiers on the left, capturing several enemy artillery batteries and taking prisoners on the nearby hills. Other Rifian batteries maintained a vigorous and accurate fire on the landing area and against ships lying offshore, hitting the battleship *Alfonso XIII* several times and forcing her to withdraw out of range. Nevertheless, casualties on this first day came to only 124 men in the Spanish side, while 10,000 men and 2,000 tonnes of material were brought ashore. Rifian counterattacks had meanwhile been broken up by naval gunfire and the close support provided by Spanish aeroplanes.

This initial landing would be followed up on following days when the rest of the fleet arrived from Ceuta. September 9 saw continued air action, though at a less intensive rate with slightly more than half the number of mission being flown than were flown on the 8th. Even so, two Dorniers were forced down, one by enemy fire and one by mechanical failure, though again both crews were saved. Other machines were hit, including that of Lt. Nombela Tomasich Antonio who carried on his mission despite a serious head wound and thus became the eighth Air Force officer to receive the Laureate Cross. Meanwhile the flotilla from Melilla had been hampered by adverse weather, eventually landing its troops on the 11th. On that day the defenders of Al Hoceima Bay launched their final serious counterattack, which failed, after which the French warships returned to Wahran (Oran) in Algeria.

Meanwhile the French had been preparing their own invasion of the Rif Republic. Its primary purpose was probably to prevent Abd al-Karim from concentrating all his forces against the Spanish threat to his Mediterranean coast. Starting at almost the same time as the landings at Al Hoceima, it meant that Abd al-Karim found himself fighting on no fewer than four fronts: Melilla in the east, Titwan in the west, Al Hoceima in the north and against the French in the south. Despite his exceptional skill as a military commander, and



In addition to constructing the Breguet Br.19 under licence, Spain’s Construcciones Aeronáuticas SA (CASA) built two Breguet 26T flying ambulances based upon the Breguet Br.19. (CASA photograph)



A Loring R.I two-seater reconnaissance light bomber, designed by Eduardo Barrón and his team, photographed in 1925 with a flat tyre. A squadron of these machines were sent to Titwan in northern Morocco the following year. (Sanchez Mendez archive)

the high quality of the small regular army of the Rif Republic, the result was no longer in much doubt. Abd al-Karim had also made one major tactical error by assuming that the Spanish naval landing would be on the easier beaches inside the bay of Al Hoceima.

The Spanish ships from Melilla completed landing the bulk of their troops by 17 September. The Spanish Breguet XIV and XIX squadrons had also returned their attentions to this battle, which continued despite the forced landing of three aeroplanes due to enemy fire or mechanical failure. On 20 September Primo de Rivera himself came to Al Hoceima to see the progress of Spanish arms. The latter were now suffering losses from Rifian artillery and sniper fire from neighbouring hills, while the need for a breakout was made more urgent by the approach of winter.

A renewed Spanish offensive was therefore planned for 22 and 23 September, with the primary aim of seizing control of hills overlooking the landing beaches. It would then attempt to take the nearby peak of Jabal Malmusi. For this reason the mountain had been closely studied by Spanish reconnaissance aeroplanes on the 9th. Rifian heavy artillery positions on the mountain had already forced all Spanish ships other than the armoured battleships to move out of range. Even the latter had been struck an average of 40 times each. Rifian resistance was determined and the Spanish offensive had not taken as much territory as had initially been hoped. Next day things went better for the Spaniards, yet they still had a fierce fight before taking control of the 500-metre high summit, the last defender being stabbed to death by one of Gen. Franco's Legionaries. The road to Ajdir, capital of the Rif Republic, was at last open.

By ordering aeroplanes to maintain a rolling offensive, with from six to eight machines over the target area at any time, Rifian fire was supressed while Spanish troops advanced. As a result almost all the objectives were achieved during the morning and many prisoners were taken. The Fokker Group led by Prince Alfonso de Orleans proved particularly effective, remaining over the targets for three hours until Spanish troops secured their gains. Then, during the afternoon, air activity moved southward, bombing and strafing groups of enemy retreating into the hills. A total of 21 tonnes of bombs (1,133 projectiles) were dropped. However, the weather was worsening and so this air assault was suspended. The crews had by now flown a total of 129 hours, after which the only sorties were reconnaissance flights and two bombing missions by flying boats in an area where it might prove possible to establish a forward airfield.

23 September had, however, seen the departure of the Farman Goliath heavy bombers. To replace them, a new Spanish squadron of Breguets were sent to Titwan from Seville under Capt. Sandino. Adverse weather prevented flying from 25-27 September, but over the next two days reconnaissance missions helped prepare for the next Spanish advance. Of particular importance were photographs taken of an enemy artillery position at Ait-Kamara, about 10km from the bay, which consisted of 18 guns. However, there were also Spanish prisoners held nearby so no bombs were dropped.

Spanish aeroplanes then launched an intensive campaign on 30 September with over 60 machines attacking in waves of squadrons every 45 minutes, each sweeping in at very low altitude. The enemy were driven from several hills but a Fokker, a Potez and a Savoia were downed, though without loss to their crews. Jabal Malmusi was finally taken on the 30th and the road to the Rifian capital was open. On 2 October Ajdir was captured, though Abd al-Karim and the government of the Rif Republic escaped to continue the struggle elsewhere.

Further south, the French were thrusting into Rifian territory and on 18 October the intervention of a Spanish Bristol squadron from the Fourth Group saved one French column from looming disaster. This squadron and its leader, Comm. Fernandez Mulero, were jointly awarded France's Croix de Guerre. Meanwhile Spanish operations were winding down for the winter and on 9 November Gen. Primo de Rivera left Morocco and returned to Madrid. The flying-boat tender *Dédalo* had also gone home, leaving Spanish Naval air operations to a squadron of six Macchi M.24s operating from the lagoon south of Melilla.

In December 1925 attention again turned to long-distance flights by Spanish Dornier Wal flying boats, each heading for locations with long historical links to Spain; namely Buenos Aires; the

Philippines and Spanish Guinea (now Equatorial Guinea). There were similarly efforts to revive aeroplane manufacture in Spain. The Construcciones Aeronáuticas SA (CASA) had already been established in 1923 to build the Breguet Br.19 under license but delays in erecting the factory and installing suitable machinery meant that the first Spanish built Breguet did not fly until November 1926.

The year 1926 would see major military operations in the Spanish Protectorate in northern Morocco come to an end. There was, nevertheless, still serious fighting against scattered rebel groups during the winter and spring. These also involved the Spanish air arms. On 11 May Lt. Felix Martinez Ramirez was badly wounded during a reconnaissance sortie which located a larger than usual enemy force, which Ramirez then bombed and strafed. The primary Spanish military aim was to link their bridgehead around Al Hoceima with territory in the east of the Protectorate, around Melilla, which the Spanish had never lost. On 20 May, this was achieved by a Spanish column closely supported by aeroplanes, however two airmen were killed. Six days later Abd al-Karim surrendered to French forces at his final headquarters of Targist, in the mountains southwest of Al Hoceima.

For Spain, the final operations were directed against remaining centres of resistance in the west of what had been the Rif Republic. They were supported by Spanish squadrons at Titwan and al-Arash which had themselves been reinforced by additional units of Breguet XIX and Loring R-1s. Other Moroccan fighters attempted to continue resistance, but on 3 November 1926 their last significant leader was killed in battle and the struggle gradually came to an end during 1927.

In what was possibly the last air action of war, on 4 July 1927 Capt. Matanza Felipe Vazquez, Commander of the Third Group, was killed by groundfire when attacking a "rebel" position at Jabal Hazzana in his old Breguet XIX. Just six days later Gen. Sanjurjo y Sacanell signed a General Order proclaiming the pacification of the Spanish Protectorate. This was followed on the 11th by a ceremonial flypast by the seven Spanish squadrons, which had taken part in the struggle from 2 November 1913 until 10 July 1927. It had cost the lives of 79 pilots and observers, plus the loss of 139 aeroplanes. Eleven airmen had been awarded the Laureate Cross of San Fernando, and 24 the Medal of Individual Merit.

However, this struggle had not only been financially expensive for Spain but had caused such tensions within Spanish society and its armed services that the stage was set for further political unrest. Primo de Rivera lost the support of the Army and had to resign in 1930. The following year King Alfonso XIII was deposed, and the Second Spanish Republic was proclaimed. This in turn was followed by the outbreak of the Spanish Civil War (17 July 1936 to 1 April 1939) and Gen. Franco's dictatorship, which lasted until 1975.

3

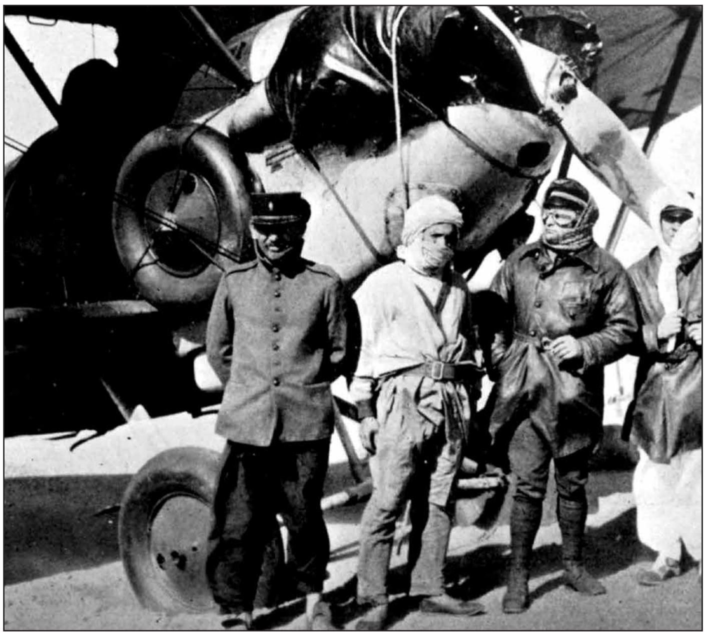
FRENCH AIR OPERATIONS IN NORTH AFRICA

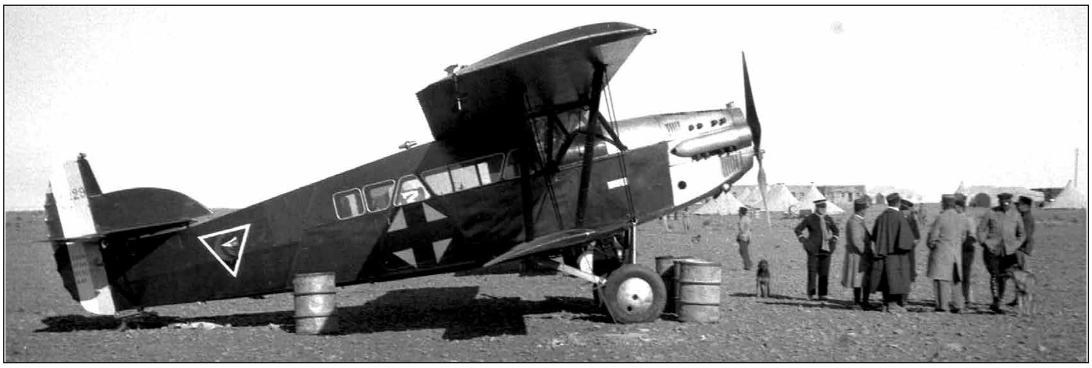
By the end of the First World War, France had largely re-established and consolidated its position in the three North African territories of Tunisia (a protectorate), Algeria (governed as part of France itself), and Morocco (a protectorate shared with Spain). To the south the situation in France's vast Saharan empire was also relatively stable, though large areas remained effectively ungoverned, while much the same was true of France's vast sub-Saharan empire.

With a wealth of varied experience and a general record of success in North Africa and the Sahara, the French Army's Service Aéronautique felt confident of taking on the responsibilities implied by the creation of a specific colonial aviation service in January 1920. Thereafter French aviation would play an increasing role in all these areas during the 1920s and 1930s, though it always remained secondary to that of the French Army. In fact, the French Air Force never became a dominant arm in France's Arab territories, as the British RAF did in Iraq and the Aden Protectorate. Although the Service Aéronautique of the French Army became a "special arm" in December 1922 it remained part of the French Army. Only in July 1934, was this Service Aéronautique separated to become the Armée de l'Air.

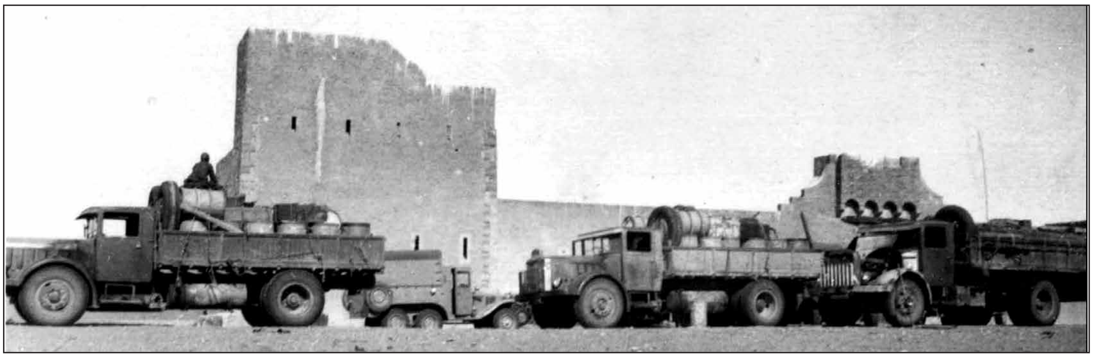
Clearly French strategy in both North Africa and the Levant did not envisage French air power becoming a dominant factor. Instead it was seen as a means whereby control could be extended and maintained quickly and relatively easily with a minimum number of troops on the ground. Things did not, however, go entirely to plan. The French soon found themselves involved in serious military confrontations in both Morocco and Syria in the 1920s. In both areas the Service Aéronatique would be called upon to play a prominent role, though still a supporting rather than leading one. In both countries French military and political leaders claimed, with some justification, that aviation saved lives – not just those of French troops, but also of assorted "dissident" groups – by bringing crises to a speedier conclusion than would otherwise have been possible.

A specific organisation known as the French Colonial Aviation came into existence as a result of a government order on 19 January 1920. Central to this idea was close collaboration between the Ministry of War and the Ministry of the Colonies. Such collaboration had worked well during the crises which threatened the French position in North African during the First World War and the concept was initially developed on a modest scale. However, the idea contained the seeds of something much more ambitious, eventually extending from North Africa, through the Levant to


The year 1934 saw the French Army's Service Aéronautique becoming a separate force as the Armée de l'Air Française. Meanwhile French military airmen continued to push the boundaries of desert aviation. Here Lt. Piechon (centre) and his colleague, both muffled against the Saharan dust and cold, stand in front of their Potez 25 at Ain Qizam (Ain-Guezzam) on the far southern border of Algeria. Note a spare wheel attached to the front fuselage. (Potez archive)



This Potez 29 transport of Escadrille VR 548 of the 2nd Groupe, based at Wahran (Oran) around 1929, is marked with Red Crosses for use in the *sanitaire* or air ambulance role. It was nevertheless still used as transport when the squadrons changed location. (Henri Lafite photograph, Jarrige archive)



Lorries laden with barrels of aviation fuel arrive at Fort Lallemand (Burj al-Hiranah) south-east of Warqlah in the mid-1930s. (Jarrige archive)

French Indochina on the other side of the world.

In each area the Colonial Aviation would have its own support services and military staff. The work of the flying units was expected to be very specialised, each according to its own geographical, climatic, political and even cultural situation. At the same time such units were expected to undertake a much broader range of operations than those undertaken by flying units based in France itself. The resulting greater autonomy and greater responsibilities were accompanied by a need to employ local civilian labour in workshops at aerodromes and elsewhere, though permission was only given reluctantly in some places. Where possible such a civilian element was to be European, or put more bluntly to be “white”, but indigenous inhabitants could also be drawn into the system, especially those with mechanical, technical or administrative skills. Such men had, for example, been employed at the Hussein-Dey aircraft park outside Algiers since 1919, though many would be dismissed only a year later.

NORTH AFRICA

In Tunisia, the end of the First World War saw a number of flying units still based in the country and very busy because of the unstable state of the frontier with nominally Italian Tripolitania. They consisted of four Voisin squadrons; VR 541 at Fumm Titawin, VR 542 at Zarzis, VR 543 at Gabes, and VR 544 at Midnin (Medenine), plus a Caudron squadron, C 490 in Sfax. Although C 490 was disbanded in December 1918, as had been C 489 in Morocco a few weeks earlier, other units continued flying border patrols under active service conditions for many months after the Armistice.

The end of the First World War in Europe had, of course, made a considerable amount of relatively modern aeroplanes available for North Africa. Early in 1919 it was therefore decided that new units should be established, particularly in Algeria and Tunisia. In May 1919, French aviation in these two countries was also restructured into four Divisions centred upon Wahran (Oran), Algiers, Constantine and Qabis (Gabes), each theoretically having three squadrons, with a Higher Command located at Hussein-Dey aerodrome outside Algiers. Most of these French squadrons normally remained together at their divisional aerodrome, though one of the Wahran squadrons was based at Biskra on the edge of the Sahara. This new arrangement remained in place until January 1920 when there was further restructuring. Henceforth French military aviation in Algeria and Tunisia would consist of one Regiment (the Regiment d’aviation d’Algerie-Tunisie), formed of the four divisions shown in Table 3:

TABLE 3: FRENCH MILITARY AVIATION IN ALGERIA AND TUNISIA

LOCATION	SQUADRON	TYPE
Algiers	1st Escadrille	Farmans, ex-F 546
	2nd Escadrille	Farmans, ex-F 547
Wahran (Oran)	3rd Escadrille	Voisins, ex-VR 543
	4th Escadrille	Voisins, ex-VR 548
Constantine	5th Escadrille	Voisins, ex-VR 544
	6th Escadrille	Voisins, ex-VR 549
Tunis	7th Escadrille	Voisins, ex-VR 541
	8th Escardille	Voisins, ex-VR 542

The considerably larger number of French flying units in Morocco would be formed into two regiments, which together were known as the *Aviation du Maroc*. The 1st Regiment d’aviation du Maroc would consist of the units shown in Table 4:

TABLE 4: *AVIATION DU MAROC*

1st Régiment d'Aviation du Maroc		
	1st Escadrille	Farmans, ex-VR 551
	2nd Escadrille	Voisins, ex-VR 555
	3rd Escadrille	Farmans, ex-F 552
	4th Escadrille	Farmans, ex-F 553
	5th Escadrille	Farmans, ex-F 554
	6th Escadrille	Farmans, ex-F 558
2nd Régiment d'Aviation d'Observation		
	1st Escadrille	Spad S.11s, ex-Spa 55
	2nd Escadrille	Salmson 2s, ex-Sal 8
	3rd Escadrille	Breguets, ex-Br 2

Bloch MB.120 no. 4 was taken over from Air Afrique airlines to be used by the 2e Escadrille in North Africa. Here it is seen with a Potez 29 of the 3e Escadrille of the 3e Escadre at Tamanrasset in November 1935. (Armée de l'Air photograph)

	4th Escadrille	Salmson 2s, ex-Sal 105
	5th Escadrille	ex-F 556, not yet available
	6th Escadrille	ex-VR 557, not yet available
	7th Escadrille	not yet in Morocco
	8th Escadrille	not yet in Morocco

Naturally, the end of the First World War led to a change of priorities and on 5 May 1919 Gen. Robert Nivelle decided that French squadrons in North Africa should work towards the creation of a reliable network of air routes linking Tunisia, Algeria and Morocco. This would be a prelude to the establishment of civilian airlines to operate along such routes. Some preparatory work had been done during the Great War and it was now envisaged that aviation would play a significant role in the economic development of French North Africa.

However, the Armistice in Europe did not mean an end to tensions in the French Sahara, any more than it did in Italian Libya, though the problems faced by France were as nothing compared to those facing Italy. In such an environment the importance of air power was obvious, not least as a means of demonstrating French might and prestige. However, air power was expensive and required technical support, resupply convoys and fuel dumps, all of which might be vulnerable to action by Saharan dissidents. Meanwhile French aircraft would continue to operate from the edge of the desert, as the establishment of an air base at Tamanrasset in the deep south of Algeria was no longer considered an urgent priority. It nevertheless remained an ambition, along with the establishment of a regular link by air across the Sahara to French territories in West Africa.

A more pressing need was to impress various tribes in western Algeria, along the frontier with Morocco, which remained to some degree "dissident". Gen. Nivelle therefore decided upon a show of force, especially by aeroplanes operating from Bishar (Colomb-Bechar). His plan was for French machines to fly low over the palm groves and *ksours* (Arabic *qsar*) or fortified villages of the area, very obviously exchanging signals with French troops on the ground to show how effective this new form of warfare could be.

Five archaic Farmans of F 547 squadron under Capt. Daudy, who had replaced Lt. Bernard in summer 1918, were therefore sent to Bishar in February 1919. From there they would accompany a motorised column with a machine gun section in a month-long expedition, initially heading south but then turning east. The airmen were to make a reconnaissance of the Wadi Guir and Wadi Saoura areas, through Bani Abbas, Ksabi and Adrar. They would then do the same along the southern edge of a vast sea of sand called the Great Western Erg, before reaching Warqlah (Ouargla) on 28 February 1919.

The expedition crossed almost 2,000kms of harsh desert and was considered to have been a political and military success, if not entirely a technological one. Some local leaders had been invited to see how the new air-to-ground wireless communication worked, and to accompany some of the motorised ground patrols. However, only two of the original five aeroplanes reached Warqlah before returning to their base at Biskra. The other three had already returned to Biskra, after suffering mechanical problems earlier in the expedition.

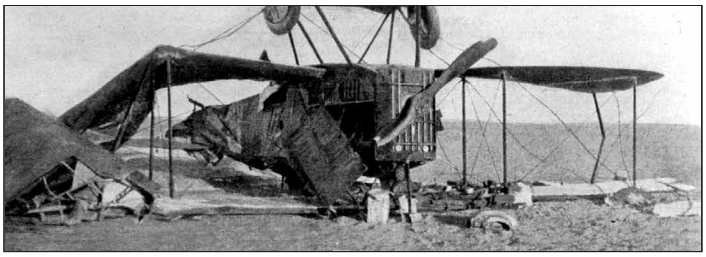
Following the Bishar to Warqlah expedition, squadron F 546 was withdrawn to Algiers to be re-equipped; its place at Biskra being taken by the almost as old-fashioned Voisins of VR 549. In fact, the whole enterprise had reinforced the fact that aeroplanes needed landing grounds prepared in advance, along with mechanics, fuel and spares waiting for them when they arrived. Thus the weaknesses as well as the strengths of desert air power with the technology available in 1919, had both been highlighted.

The conquest of the Sahara by air might have paused, but the immediate post-war months did see motorised expeditions reaching deep into southern Algeria. Some in France argued that, by spring 1919, it was time for aviation to play its part, but other senior men urged caution. In July 1919 even Gen. François-Henry Laperrine wrote that the role of aircraft should be confined to attacking dissidents in clearly defined and well-known locations that were themselves on clearly marked roads. It was too soon, he maintained, for airmen to venture further afield or to attempt to work with deep desert patrols by camel-mounted *meharistes*. In fact, the role of French air power was still to control the edges of the desert, not the vast Sahara as a whole. This did not stop deep desert flights, of course, and between 24 January and 31 March 1920 Com. Joseph Vuillemin and his observer, Lt. Chalus became the first men to fly across the Sahara.

In the meantime, however, Gen. Laperrine had been killed in a freak accident while sitting on the lap of mechanic Marcel Vasselin, riding as an extra passenger in the rear cockpit of a two-seater Breguet XIV flown by Lieutenant Bernard. After leaving Tamanrasset on 5 March 1920, Bernard had to make an emergency landing, the Breguet flipping onto its back. Laperrine was fatally injured though the other two men were virtually unhurt. The famous General's last words to his flying companions were: "People think they know the desert … People think I know it. Nobody really knows it. I have crossed the Sahara ten times and I will stay here." Vasselin and Bernard buried François-Henry Laperrine near the aeroplane, though his body was later reinterred at Tamanrasset, next to his friend Father Charles de Foucauld. Tamanrasset was also renamed Fort Laperrine, thought it reverted to its original name following Algerian independence.

In Morocco, obsolescent Farman pusher types still formed the backbone of French aerial strength, although the older machines at Casablanca were replaced by newer ones, powered by 130hp engines, in December 1918. These were immediately needed in support of a military operation to restore the French position in the large Tafilalt oasis, close to the Algerian border. The four Farman squadrons in the country at the start of 1919 were F 552, F 553, F 554 and F 558 which had replaced F 556; the latter being due for re-equipment with Voisins. Hubert Lyautey, the French Resident in Morocco, wanted his air power to be tripled and in January 1919 Gen. Duval, Inspector General of French military aviation, agreed that the colonial squadrons should be equipped with more powerful Breguet XIVs, though this would take time. In the event a decision was made early in March to send four new Breguet squadrons to Morocco and by the start of 1920 almost all the older aeroplanes in the French Protectorate had been replaced. Nevertheless, the last unit to receive a full complement of new Breguets still had to soldier on as a mixed formation until May.

Gen. François-Henry Laperrine sitting on the lap of mechanic Marcel Vasselin, in the rear cockpit of a communications version of the Breguet XIV flown by Lieutenant Bernard, ready to start their fatal flight from Tamanrasset on 5 March 1920. (Jarrige archive)



The crashed Breguet XIV in which Gen. Laperrine was killed. (Jarrige archive)

Meanwhile, the effectiveness of the available squadrons was increased by establishing subsidiary airfields, mainly to serve as refuelling stops. One of the most important of them was at Ain Medouina, 60km north of Fez and close to the frontier with the troubled Spanish Protectorate in northern Morocco. These isolated outposts remained vulnerable and in April 1919 Ain Medouina endured a siege by "rebel" forces; only surviving because it could be resupplied by air. Cooperation between ground and air units continued to be refined and by the time of the first major French military operation in Morocco since the end of the Great War, it had reached a high degree of efficiency.

The operation in question started in July 1920 and was launched by a column under Gen. Aubert, directed against the dissident Banu Warrain (Beni Ouarrain) tribe. The idea was to remove what French authorities called "the stain of Taza", a town east of Fez and close to the Spanish Protectorate. In fact, a dissident threat to the road between Fez and Taza was very real, so the squadrons at Fez, Taza and Meknes were mobilised to support Aubert's column. They were to carry out reconnaissance in difficult mountainous terrain and also to attack enemy forces wherever these were seen.

The whole operation was intended to be an overwhelming and unrestrained use of force. By this date, however, the so-called dissidents of Morocco were accustomed to aeroplanes, and so the importance of French flying squadrons was tactical rather than psychological. Small anti-personnel bombs and machine guns were the weapons to be used against enemy forces when the latter were close to French troops, larger bombs being dropped on the dissidents' rear areas to disrupt their preparations and undermine their morale. The air assault would, as far as possible, be continuous, though in the event the eradication of the so-called "stain of Taza" took several years.

The year 1920 saw no fewer than ten French squadrons being based in Morocco. The country would provide an unparalleled testing ground for refining new methods of colonial warfare and so-called "pacification". Of course, it was not only the terrain which provided a testing ground, but also the Moroccan people. The aspects of air warfare to be tested ranged from the accuracy of bombing to the reliability of aerial photography in the making of military maps, from the best way to establish and protect forward refuelling airfields to the most efficient means of evacuating wounded soldiers by air.

The speed of an aerial response similarly increased as communication between air and ground improved, and as the chain of command and authorisation to make an immediate response was streamlined. In fact, the speed of French counterblows in 1921 clearly surprised the enemy, though the "dissidents" soon became accustomed to it. The ability of French aeroplanes to locate and bomb hostile camps deep inside hostile territory similarly improved. Thus, the campaign to take full control of what the French colonial authorities called "useful Morocco" – as distinct from the less profitable high mountains and deeper deserts – pressed ahead throughout 1921. Not that the highlands were ignored. In September 1921 an operation to crush dissidents in the area around Bekrit in the Middle Atlas Mountains south of Fez and Meknes – the so-called Bekrit Pocket – saw French airmen operating from a forward base at Timahdit which lay 1,900m above sea level. Air operations clearly played a significant role in this operation, which resulted in the submission of local tribes to French authority on 28 October.

Operations against the "stain of Taza" remained the main "front" in this brutal colonial war and they would continue until 1924. It was a very difficult arena for the aircrews, as it was for troops on the ground. The pilots had to take off at an already high altitude, then to climb considerably higher amongst steep and jagged mountains, unpredictable and sometimes violent air currents, unexpected losses of lift, and of course terrain which rendered an emergency landing highly dangerous if not impossible.

The early stages of the Rif Rebellion really only concerned the Spanish in their northern Protectorate (see Chapter 2), but in April 1925 trouble spilled over the frontier into the French Protectorate. This period also saw the presence of more specialised squadrons in Morocco, including the Farman Goliath F.65s of the French Aeronautique Navale's Escadrille 5B2. These remarkable versions of the Farman Goliath F.60 heavy bomber could be fitted with floats or wheels and had been designed primarily as torpedo-bombers.

Nevertheless, the French air command in Morocco considered that it still did not have enough aeroplanes. As a result, France clung to a long-established policy of versatility, preferring to use machines which were capable of a wide variety of missions. Above all, however, aeroplanes and their crews should both be capable of considerable endurance in order to carry out operations across large distances and to remain in the air for a long time. Faced with an emergency in the north, as Abd al-Karim's troops took the Rif Rebellion deeper into the French Protectorate, the French high command feared that its airmen might be overwhelmed by the sheer number of tasks demanded of them. So, in order to give French Army columns the greatest possible air cover, French aircraft staggered their sorties, spacing them out rather than launching concentrated attacks.

By this time, French military aviation in North Africa had again been restructured, with the defence of the French Protectorate in Morocco falling to the Breguet XIVs of the 37th Regiment d'Aviation. This consisted of the Sector Escadrilles: 1st at Fez, 2nd at Taza, 3rd at Bu Danib, 4th at Beni Malek, 5th at Marrakesh, 6th at Kasba Tadla and 9th at Assaka. They were backed up by a reserve of three bomber squadrons, 7th, 8th and 10th, all based at Meknes.

A Breguet XIV Sanitaire of the 3rd Group based at Sitif (Setif) in north-eastern Algeria, around 1925. France and Italy led the way in developing flying ambulances and systems for the evacuation of casualties by air. (Jean Veran photograph, Jarrige archive)

All these squadrons were mobilised on 13 April 1925 when Abd al-Karim launched his offensive.

A separate and rather special squadron was the *Escadrille de la Garde Chérifienne*, also sometimes called the 2nd Lafayette Squadron, which has been incorrectly linked to the French 2nd Escadrille of the 37th Regiment. In fact, these were different units, both being attached to the 37th Regiment at the same time during the "Rif Rebellion". The origins of the short-lived Escadrille de la Garde Chérifienne lay in an urgent need to expand the existing 37th Air Regiment in April 1925, due to Abd al-Karim's resistance campaign in northern Morocco. From May onwards, the 37th Regiment was strengthened by squadrons transferred from Algeria, Tunisia and France. Research by the French aviation historian Eugène Bellet shows that on 10 July 1925, General Lyautey confirmed a decision, made by the highest authorities in Paris, to accept a proposal by an American, Col. Charles Sweeney, to reconstitute the famous "Lafayette Squadron" which, composed of American volunteer pilots, had played such an epic role during the First World War. This time the Americans would fight Berber and Arab resistance in Morocco, alongside their French colleagues.

Meanwhile, however, the government of US President Calvin Coolidge (in office from 2 August 1923 to 4 March 1929) was pursuing a strongly isolationist policy, and so it was judged politically and diplomatically impossible for the squadron of American volunteers to use the name of Lafayette. Instead the French decided to call this unit the Escadrille de la Garde Chérifienne and attach it, at least nominally, to Sultan Yusuf of Morocco's armed forces. In practice it was added to the 37th Regiment, though the Sultan did cover the cost of the American volunteers' clothing and pay. The squadron was equipped with seven old-fashioned Breguet XIV A2s from the 37th Regiment's aircraft park in Casablanca, which provided necessary logistical equipment. While the pilots were American veterans of the First World War Lafayette Squadron, nine French NCOs and around 50 French technical personnel are also attached to the Escadrille de la Garde Chérifienne. Furthermore, Col. Sweeney had a French Colonel as his second in command, the other Americans being Lieutenant-Colonel Charles Kerwood, Major Charles Craig, Captain William Rodgers, Major Austin Gillette Parker, Major Paul Franck Baer, Major Granville Pollock and Lieutenant-Colonel Charles Kerwood who would serve as the Escadrille's spokesman.

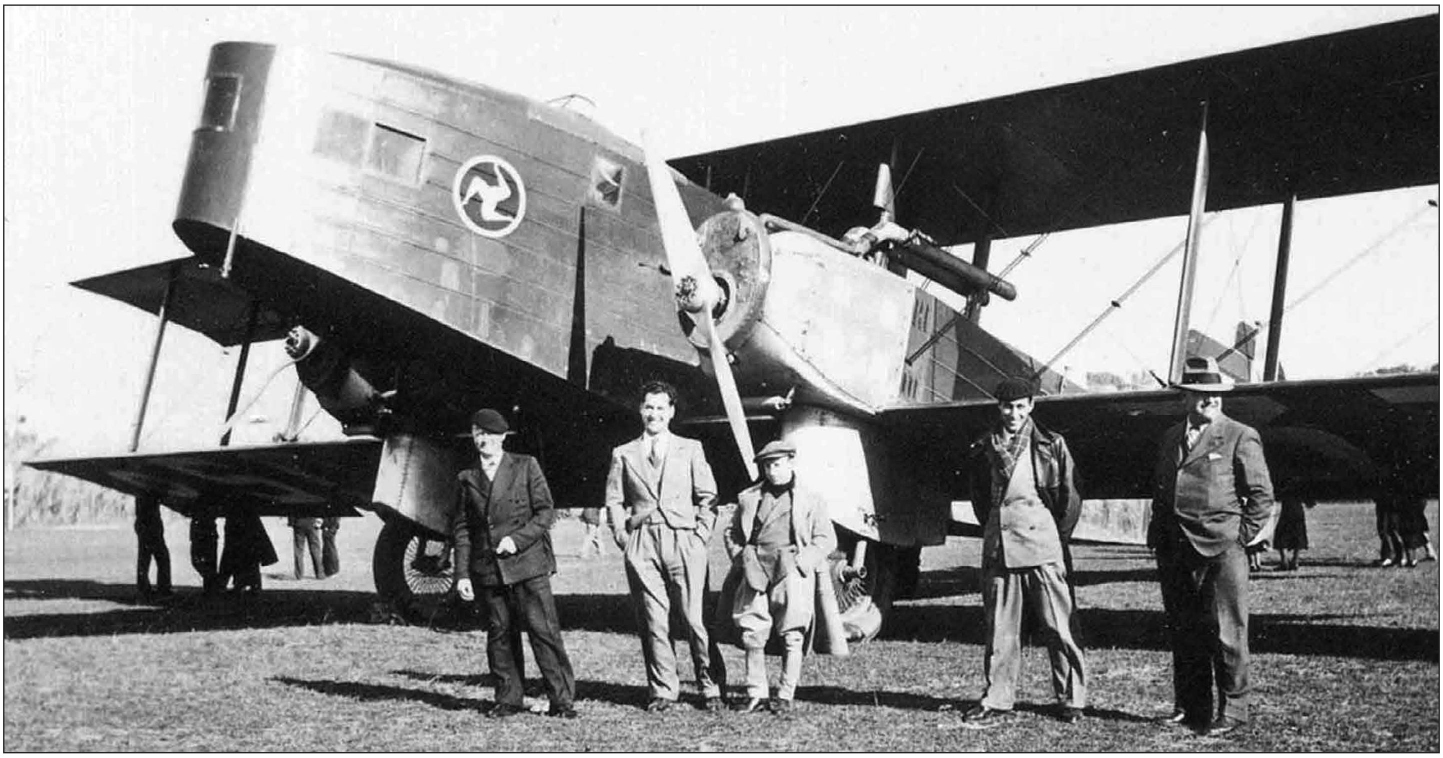
In the deep desert regions of North Africa, even the most advanced aircraft often had their fuel delivered on the backs of camels. Here a Potez 25TOE, probably of the 2nd Escadrille of the 1st Groupe normally based at Sitif in eastern Algeria, awaits refuelling in the late 1920s or early 1930s. (Jean Studer photograph, Jarrige archive)

At first everything went well for this nominally "Moroccan" unit. The men were transported from France to Morocco via Spain while seven Breguets carrying the American officers took off from Le Bourget outside Paris on 5 August 1925. They flew in five stages via Lyon, Barcelona, Alicante and Malaga before landing outside Rabat where they are greeted by General Lyautey, the French Resident in Morocco. Meanwhile the Escadrille de la Garde Chérifienne had been officially created at Casablanca on 7 August. Thereafter the squadron flew 350 operational missions from August to the end of October 1925. During these sorties, the American volunteers were sent to attack Rifian positions on several occasions, most notably bombing Shafshawan on 7 September. In fact, it is understood to have been "political reasons" – presumably pressure from the US Government – which caused the Escadrille to be dissolved on 15 November 1925, after which the American airmen returned to France the following December.

Other escadrilles based elsewhere in French North Africa would be given new numbers when they were sent to join the 37th Regiment in Morocco. Thus the 1st and 2nd Escadrilles of the 1st Group at Algiers became the 11th and 12th Escadrilles of the 37th Regiment, the 1st and 2nd Escadrilles of the 3rd Group at Sitif (Setif) became the 13th and 14th Escadrilles of the 37th Regiment, the 1st Escadrille of the 2nd Group at Wahran became the 15th Escadrille of the 37th Regiment, and the 2nd Escadrille of the 4th Group at Tunis became 16th Escadrille of the 37th Regiment. Four other squadrons would eventually be sent from France during 1926 and 1927, similarly being allocated special Escadrille numbers – 17th to 20th – during their time as part of the 37th Regiment.

Faced with Abd al-Karim's incursion, two squadrons were promptly sent from Algiers to support those already in Morocco, the first being from Wahran which reached Fez in only four days, followed just over a month later by a squadron from Sitif which had been delayed while awaiting the arrival of new personnel from France. Others would follow, until three-quarters of the entire French air strength in North Africa was committed to this campaign. The French Navy's Farman Goliath meanwhile arrived at Casablanca from their base at Cuers-Pierrefeu on the coast of Provence. Though the situation in Morocco never got so bad that they were really needed, they nevertheless provided Col. Armengaud, the commander of French flying units in Morocco, with a genuine strategic strike force.

This intensive campaign would cost the lives of 20 French airmen between April and December 1925 – a much larger number than would be lost in Syria and Lebanon over a longer period. The urgency of the situation in Morocco nevertheless convinced the French authorities that such losses were unavoidable. On 15 September 1925 no fewer than 169 sorties were flown and 20 tonnes of bombs were dropped in preparation for a French ground assault as part of the largest colonial air operation yet attempted by France. The 37th Air Regiment also undertook night bombing sorties to finally break Rif morale after Abd al-Karim's last capital fell to Spanish forces in May 1926.

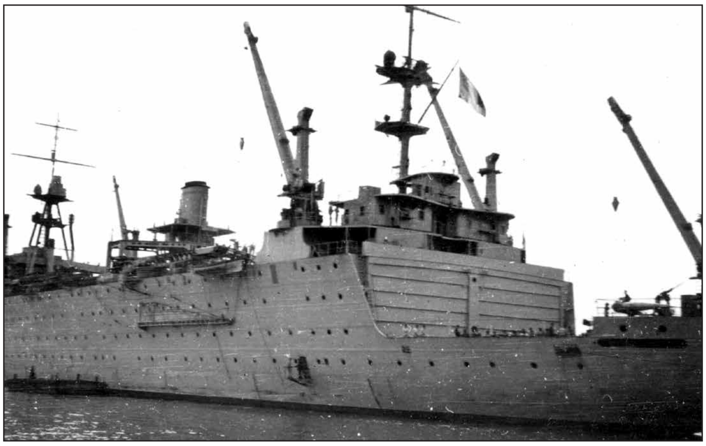


During the winter of 1935 the Armée de l'Air set up a military postal service operated by Lioré et Olivier LeO 20 night-bombers of the 5th Escadrille of the Escadre d'Alger. Bad weather has forced this particular aeroplane to land at Jijil. (Eugene Fauche photograph)

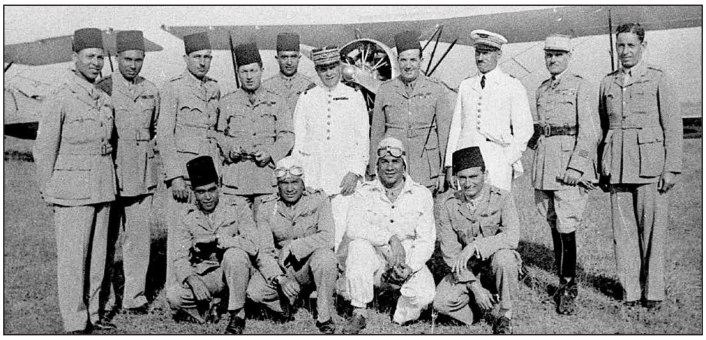
The Rif War offered an opportunity for new aeroplanes as well as new tactics and communications systems to be tested. For example, a Flight of three Nieuport-Delage Nid 29 scouts (fighters or interceptors in modern terminology) were sent to Casablanca at the behest of Joseph Sadi-Lecointe, the company's chief test pilot, to see if they might be effective as single seater fighter-bombers. Sadi-Lecointe had, in fact, volunteered to serve in Morocco during the Rif emergency, which he did from 1925 to 1927. Armed with six 20kg bombs, the Nieuport-Delage Nid 29s flew from the Beni-Malek aerodrome between 20 November and 21 December 1925, having been attached to the 4th Escadrille of the 37th Regiment.

Despite some success, this experiment was not repeated because the primary role of the Nid 29 was still as a fighter, and there was no opposition to the French over Morocco. The latter fact was clear to the French higher command, including Gen. Paul Armengaud, who realised that lessons learned in North Africa were of less value in Europe where opposing air forces would be pitted against each other. On the other hand, some lessons remained relevant, including the need to provide adequate refuelling facilities which could increase the effectiveness of a squadron three or four-fold. Also, the presence of large numbers of aircraft over the battlefield could prove crucial, but how they would be protected, or could protect themselves, in the face of serious aerial opposition was a different matter.

In July 1927 Col. Paul Armengaud was replaced by his second in command, Col. Emile Maginel, as Commander of the French air squadrons in Morocco. Nevertheless, the systems and tactics which Armengaud developed remained largely unchanged until the Second World War. Meanwhile the end of the Rif War did not mean the end of tension and disturbances elsewhere in Morocco. There remained the regions south of the Atlas Mountains, bordering Algeria. These formed an arc of occasional instability over 1,500kms long where Col. Maginel was able to redeploy some squadrons from the 37th Regiment, tasked with maintaining peace. Thus, at the start of July 1927, the French air assets were arranged as shown in Table 5.

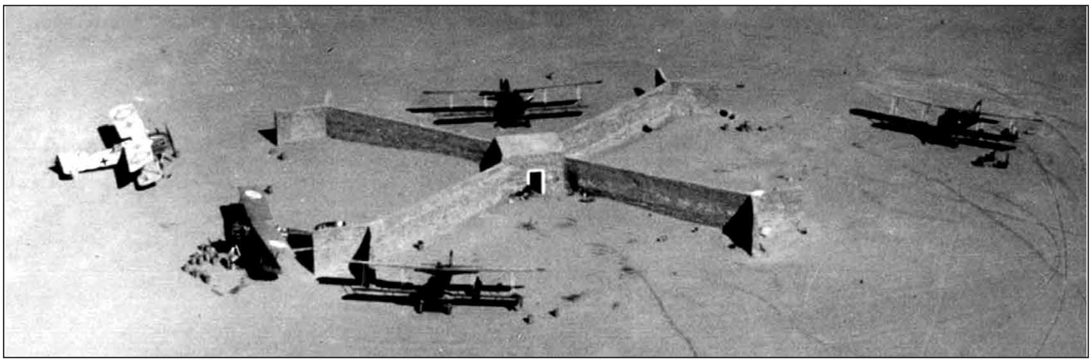


The French Navy's huge seaplane tender, *Commandant Teste*, in the harbour of Wahran (Oran) in 1933. Launched in 1929 and capable of carrying 26 seaplanes, the *Commandant Teste* mostly served in North African waters where she was used as an aeroplane transport. (Jean Studer photograph, Jarrige archive)

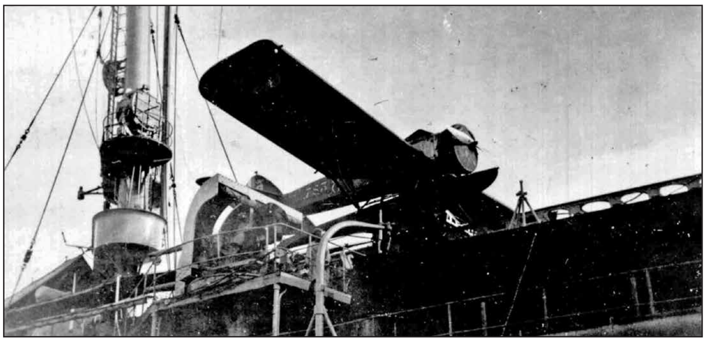


In October 1933 the survivors of the EAAF's first delivery flight of Avro 626s reached French-ruled Tunisia, their colleagues Fu'ad Haggag and Shuhdi Duss having been killed in a crash in northern France. Here they are seen with the C-in-C of the French Army in Tunisia, the French Air Officer Commanding and another French officer, prior to heading for Libya. Whether or not the smiles for the camera were genuine is unknown. (Tait archive)

Between 1927 and 1934, when the operation was declared complete, French aeroplanes were involved in what has been



The French built several different types of aeroplane pens or shelters in the Sahara. The X-shaped style seen here at Timimun in 1936 appears to be used by four dark green Breguet XIVs, plus one white Breguet XIV Sanitaire distinguished by red crosses in addition to French roundels. At the centre of the structure is a stone-built room to contain water, fuel and some essential spare parts. (Francois Fouques photograph, Jarrige archive)



The Gourdou-Leseurre GL-812 HY was a three-man reconnaissance seaplane designed for the French Navy. This example is on board the cruiser *Duquesne* in Algiers harbour in 1936, and its normally un-cowled radial engine has a protective cover. (Maurice Cronier photograph)

TABLE 5: FRENCH AIR ASSETS IN MOROCCO, JULY 1927

RABAT	37th REGIMENT HQ	
Northern Morocco	1st Group	1st Escadrille at Taza; 6th Escadrille at KasbaTadla
Algeria-Morocco Frontier region	2nd Group	3rd Escadrille at Bu Danib; 9th Escadrille at Assaka
Southern Region	3rd Group	4th and 5th Escadrilles at Marrakesh
Reserve	4th Group	7th and 8th Escadrilles at Meknes
	5th Group	1st and 10th Escadrilles at Fez

described as a classic example of "pacification". This mostly involved reconnaissance but occasionally also the bombing of suspected dissident positions, villages, tribal groups and their herds, undertaken in close association with the Office of Indigenous Affairs. Such work became easier and more effective when the squadrons were re-equipped with Potez 25 *Theatre d'Operations Exterieur* (TOE) reconnaissance-bombers. The versatile Potez 25 was built in substantial numbers for the French air force, especially the TOE version, and would be used by 22 other air forces (see Chapter 8). Some of the latter purchased these aeroplanes directly from France, while others would inherit them by one means or another during the course of the Second World War.

Operations were simplified when, in December 1929, a single unified command was established to cover both the Moroccan and Algerian sides of the largely undefined border. Aerial exploration of the High Atlas Mountains was similarly made easier by the construction of three new aerodromes between 1927 and early 1930. Things seemed to be progressing smoothly for the French until May and June 1929 when French troops suffered a major setback in the high valleys of the Eastern Atlas Mountains. As a result, French air units now had to focus their attentions here, and eventually six squadrons would committed to a new operation.

At the start of this crisis, the 2nd and 3rd Escadrilles were based at Bu Danib, while the 8th and 9th were at Assaka. They could also use the three forward airfields. On 10 May the situation became more serious, when a French outpost at al-Burj (El Bordj) was attacked by dissidents. The 3rd Escadrille, already stationed at the forward aerodrome of Rish (Rich), immediately responded by flying 18 reconnaissance and 27 bombing sorties that same day. In fact between 3 and 25 May French aeroplanes at Rish, Assaka and Bu Danib flew no fewer than 127 bombing missions.

What sparked an almost general revolt across this region was, however, the destruction of the 68th Regiment de Tirailleurs Marocains by dissidents on 9 June. This unit had only been formed in Fez in November 1927 and its virtual annihilation was followed by the rebel siege of Ait Yaqub (Yacoub), overlooking the Wadi Ziz. On 12 June four squadrons, led by Com. François d'Astier de la Vigerie, assembled at Rish, just 15 minutes flying time from Ait Yaqub. From here they were to support a French force operating along the Wadi Ziz.

Conditions at Rish aerodrome were very basic, as were the military and administrative infrastructures in this part of Morocco. Hence the fliers had to work in what were old-fashioned ways, lacking air to ground radios and flying at very low altitude over both the besieged outpost and the relieving columns in order to maintain contact. 15 June was a typical day. Early in the morning Col. d'Astier de la Vigerie's second in command, Com. Blaise, flew a reconnaissance sortie and noted that several hundred presumed dissidents were converging on Ait Yaqub. He returned to Rish and almost immediately took off again at the head of all available machines to bomb a harka or tribal warband, which was threatening the besieged outpost. The enemy was dispersed before noon in what was undoubtedly a success for colonial air power.

The 37th Regiment rotated its aircrews and aeroplanes at the forward airfield at Rish, thus allowing pressure from the air to be maintained throughout the crisis. In fact, by 19 June, 289 sorties had been flown, of which 85 had been resupply missions, while 32 tonnes of munitions had been dropped on the enemy. Almost two thirds of the French Service Aeronautique's manpower in Morocco was involved in one way or another, despite the fact that this operation was not the only one being undertaken at that time.

The following years saw French military aviation in Morocco busy in more mundane but nevertheless vital work, until the pacification of Morocco was declared complete in 1934. Considerable experience was thereby gained in supporting French columns, which penetrated ever deeper into the desert region along the frontier with Algeria. In 1932 airmen were particularly busy around the southern coastal town of Agadir, securing what was becoming a vital staging post on the French airmail service from Europe to West Africa. Amongst these pioneering pilots was Antoine de Saint-Exupéry. Best known as author of *The Little Prince*, he also described his adventures in this part of the world in *Wind, Sand and Stars*. French "colonial aviation" was, in fact, becoming an "imperial aviation". In addition to providing close support to troops on the ground, French air power had shown that the mere presence of modern aircraft, or the threat of their use, was sometimes sufficient to intimidate an indigenous population.

While the short-lived Escadrille de la Garde Chérifienne manned by American volunteers but under French control might – with some stretch of the imagination – be regarded as the ancestor of the Moroccan Air Force, the period of the French Protectorate saw an increasing interest in aviation within a tiny section of the Moroccan population. Generally speaking the French authorities were reluctant to allow the *indigènes* or indigenous peoples of North Africa any role in aviation, even on the ground. In one area, however, they were thought to have a potentially useful role. This was as "aerial guides" during the development of flying routes across desert areas. It was also thought that their presence might save the lives of European pilots if the latter had to make emergency landings in areas dominated by "unpacified" tribes. Without doubt the pioneer pilots of the Aéropostale, French airmail service did face real danger if they were captured by potentially hostile locals.

Efforts to develop air routes from France to Morocco actually started in March 1918, eight months before the end of the First World War, but of course still required frequent refuelling stops. In 1919 the idea was revived, along with the dream of establishing a regular airmail service from France, via Morocco and along the Atlantic coast of Saharan Africa, to French West Africa. Now this dream seemed a real possibility. In March 1919 the Moroccan Grand Vizier Muhammad al-Muqri (El Mokri), was amongst the dignitaries who welcomed Pierre-Georges Latécoère at the conclusion of his two-day flight from Toulouse. Muhammad al-Muqri represented Sultan Mulay Yusuf Bin Hassan (ruled 1912-1927), who, unlike his predecessor, was enthusiastic about the possibilities offered by aviation.

Cultural problems remained, however. One was the attitude of tribes and local leaders to foreigners, especially "infidels", crossing their ancestral territory. Law and tradition stipulated that merchant caravans, consisting of camels or mules depending on the terrain, were accompanied by recognised guides. The latter not only prevented caravans from getting lost but, being known to the tribes through whose territories the merchants were passing, served as representatives of the Sultan under whose protection the merchants were travelling. Without such official guides, the caravans might be seen as fair game by warlike, often poverty-stricken and consequently predatory tribesmen. The tribes could do nothing to aeroplanes overflying their lands, but if a pilot had to make an emergency landing, that was a different matter. How would such aircrew prove that they had the right – namely the Sultan's authorisation – to be there?

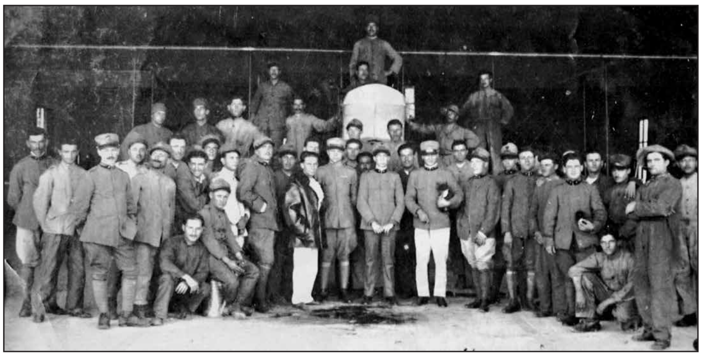
Finding suitable guides to fly aboard Aeropostale aeroplanes would be very difficult. There simply were not enough Moroccans who could speak French or Spanish, who were willing to undertake the task and who enjoyed respect amongst the tribes. Those who did fulfil these criteria included men named Attaf, Mayan, Boom, Mbarek, Oulad Maatalah, Oulad Bachir N'Dour, Chtouka and Izerguiyin. Sadly, little is known about them, but their contribution to the opening up of Moroccan and Saharan air routes was significant.

There were other Moroccans keen to take to the air, including those who helped establish flying clubs in their country. Casablanca was the first city to have such a club, set up to mirror those already existing in France. Rabat, Fez, Wajda and the international city of Tangier followed, and although most members were French, a few wealthy local inhabitants were eager to join. In fact, the first appears to have been a Jewish Moroccan named Benytah who earned his pilot's licence at Casablanca in 1930. He was followed by Muslim compatriots such as Chenaf in Casablanca, Benabdallah in Rabat, Kenitra and Cherif Ben Abdessalam in Tangier.

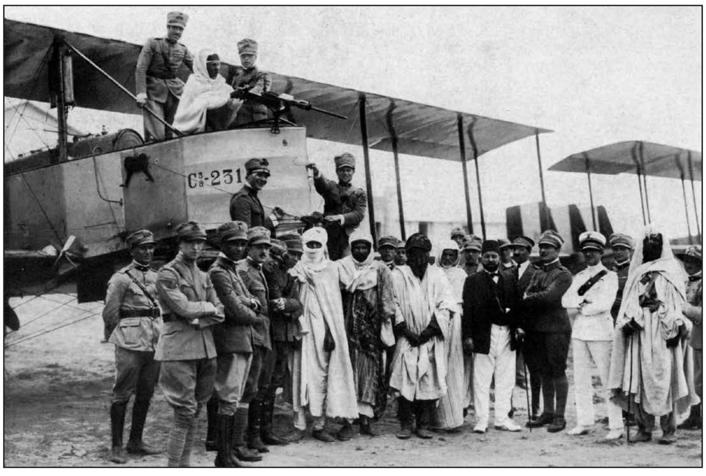
4

ITALIAN AIR OPERATIONS CONTINUE IN LIBYA, AND EVENTS IN EAST AFRICA

Italian military operations in Libya during the interwar period are usually characterised as a blatant and brutal example of Fascist European aggression against a non-European country. Although there is much truth in this interpretation, Italian military operations in Libya actually started almost immediately after the Great War ended and before the Fascist movement under Benito Mussolini took power in Italy in October 1922. Seen from the narrow perspective of military aviation history, they were also interesting and successful.



Members of the Corpo Aeronautico Militare's 106th Farman Squadron in front of an Italian-built Farman at Millaha (Mitaga) aerodrome outside Tripoli shortly after the end of the First World War. (Museo Storico Aeronautica Militare, Vigna di Valle)



Libyan tribal leaders, Italian officers and a local official with Caproni Ca.3s of Nos. 12 or 13 Sq. at Millaha aerodrome, probably in 1919 or 1920. (Museo Storico Aeronautica Militare, Vigna di Valle)

From 1912 to 1927, the territory which became modern Libya was known to Europeans as Italian North Africa. Here the two most famous leaders of the Libyan resistance were Idris al-Mahdi al-Sanussi (later King Idris I of Libya) and Umar Mukhtar (eponymous hero of film *Omar Mukhrat, Lion of the Desert* in which his character was played by Oliver Reed). Both were based in the eastern province of Cyrenaica rather than the western province of Tripolitania. Meanwhile the southern province of Fezzan only came to prominence during the later stages of this struggle.

Almost immediately after the Great War an independent state was declared in Tripolitania. Calling itself Al-Jumhuriya al-Trabulsiya (The Republic of Tripolitania), and having its capital at Aziziya, the new state was proclaimed by a number of local leaders who went on to formally announce its establishment at the Paris Peace Conference in 1919. These Libyan leaders did not, however, envisage a complete removal of the Italians from their country. Instead they wanted the Italian occupation to be replaced by an internationally recognised Italian commercial domination. The Republic of Tripolitania is also widely regarded as the first modern republic in the Arab world. Unfortunately, the Republic of Tripolitania found very little support outside Libya and was ruthlessly crushed by Italian forces.

On the other side of the fence, the Italian military position in Libya remained precarious at the end of the First World War, controlling only a series of small coastal enclaves and not all the coast between. Administratively, Italian North Africa was one unit, with Italian Tripolitania only being declared a separate entity from 26 June 1927 to 3 December 1934. On the latter date the Italian government again declared its North African territories to be a single colony, henceforth called Libya.

While the leaders of the Republic of Tripolitania were optimistically announcing their new state at the Paris Peace Conference, the British Secretary of State for the Colonies was suggesting to his Italian counterparts that Egypt might transfer the oasis of al-Jaghbub to Italian North Africa in return for Italian recognition of Egyptian sovereignty over the disputed frontier port of Sollum. Carried through with only the grudging agreement of a virtually powerless Egyptian government, this idea would cause considerable difficulty to the British and the Egyptians, though not in the end to the Italians.

On the ground in Libya, the end of the First World War had seen a withdrawal of the remaining German and Ottoman advisors previously attached to local resistance forces. The latter were seemingly expected to just fade away. On 22 December 1918, the Italian government issued a decree which was primarily concerned with administrative matters. However, it also reorganised and reinforced the Italian military presence in North Africa. Eight days later Italian troops moved eastward, out of their existing Tripoli enclave, to reoccupy al-Zawiyah. Little more than a week later, local Libya forces struck back by attacking locations along the Tripoli to al-Zawiyah railway which the Italians were getting ready to repair. There was a fierce clash between the so-called "rebels" and a mixed force of the Italian Army's Eritrean and Libya troops under Col. Mezzetti, who drove them off with considerable loss.

It was sign of things to come and other clashes followed, usually involving Eritrean soldiers who bore the brunt of operations until new units arrived from Italy under Gen. Zoppi. Rather than immediately employing their increasing military strength, the Italian authorities tried a conciliatory approach, offering the people of Tripolitania increased rights in return for the Tripolitanians accepting an Italian reoccupation of various locations. During these negotiations the Italian units already established in places like Zanzur, Aziziya, Misratah and Sirt remained static. Similarly, the Italians appear to have made no significant use of their air units.

On the other hand, by the summer of 1919 Italian air strength in its Libyan colonies appeared quite strong, though still consisting of a mixture of old fashioned and more modern aeroplanes. For example, on 7 August 1919 these Italian air units were led by temporary Maggiore (Major) Giovanni Spreafico. Under his command were four reconnaissance squadrons consisting of a mixed unit of Farmans at Benghazi (Berka airfield) with five operational machines, No. 106 Farman Sq. at Tripoli (Millaha aerodrome) with four operational machines plus one non-operational, a Farman Section or Flight) at Zuwarah with three operational machines, and a Farman Section or Flight at Tobruk with two operational machines plus one non-operational. These were supported by a Farman depot at Tripoli (Millaha) with two operational machines, plus two being assembled and three more on their way.

Spreafico's bomber units were Nos. 12 and 13 Caproni Sqs. at Tripoli (Millaha), each with two operational machines, No. 90 S.V.A. Sq. with six operational machines plus seven under repair again at Tripoli (Millaha), and No. 89 S.V.A. Sq. at Hums with two operational machines plus five under repair. These were in turn supported by two Aeroplane Depots at Tripoli (Millaha), No. 2 Aircraft Depot with one operational Caproni plus one under repair, and No. 13 with three non-operational S.V.A. machines plus six being assembled. Also under Maggiore Spreafico were three units of FBA flying boats, No. 286 Squadriglia at Tripoli with six operational machines, two under repair, two being assembled plus two out of use, No. 3 Section at Hums with two operational machines plus one out of use, and a Mixed Section with one operational machine, one under repair, one being assembled plus one out of use. Finally, there were two static Observation Balloon Sections stationed at Tripoli and at Hums.

By 6 November 1919 Italian aviation in Libya had a new commander, Col. Ettore Prandoni, and the strength under his command had increased slightly. The Farman Mixed Squadron at Benghazi (Berka) now had seven operational machines plus one under repair, and No. 106 Farman Sq. at Tripoli (Millaha) had eight

A Fiat-Arsenale armoured car patrolling a barbed wire defensive barrier in Libya a few years after the end of the Great War. (Archivio Ufficio Storico SME)

Fiat 15 Ter light armoured cars on patrol in Cyrenaica around 1925. (Archivio Ufficio Storico SME)

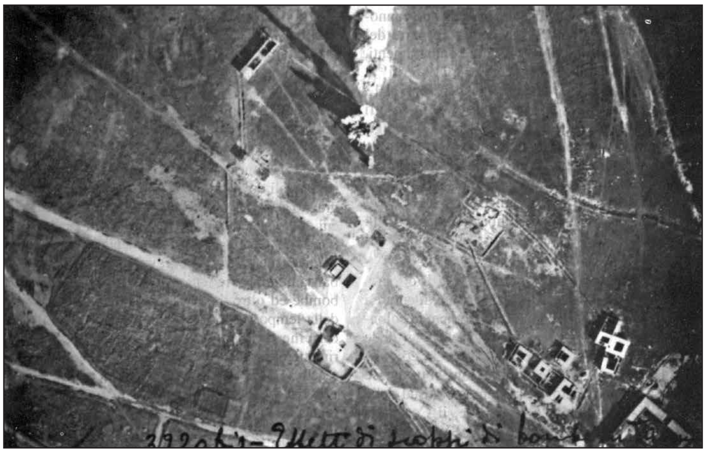
machines all of which were operational, while the Farman Aircraft Depot at Tripoli (Millaha) had two operational machines, two under repair, two being assembled plus three still on their way. The bomber strength remained unchanged with two Caproni squadrons at Tripoli (Millaha), each having two operational machines, the S.V.A. squadrons at Tripoli with eight operational machines plus four under repair, and Hums with four operational, four under repair plus two no longer used. The two Aeroplane Depots at Tripoli (Millaha) currently consisted of one operational Caproni, plus one under repair and six being assembled, and three operational S.V.A. machines plus five under repair and one being assembled. Meanwhile the FBA flying boat units now consisted of No. 286 at Tripoli with four operational machines, two under repair plus two being assembled, and the Section at Benghazi with two operational machines, plus one under repair and one out of service. The Balloon Sections were no longer mentioned.

The following year, 1920 would turn out to be a difficult one for the Italians in Libya. Initially these difficulties sprang from demands by local leaders to have considerably more influence on the governing of Tripolitania, which the Italians largely refused. Other local leaders took the opportunity to take control of certain fortified or defensible positions. On 28 February a local leader, Ramadan al-Shtaiwi, obliged the 50-strong Italian garrison of Misratah to withdraw to Tripoli by sea, even though this outpost had been established in 1919 in agreement with local inhabitants. Other isolated detachments suffered a similar fate or were taken prisoner by local leaders. After Shtaiwi was killed in a skirmish on 24 August 1920, leadership of the anti-Italian forces went to Ahmed al-Mrayid.

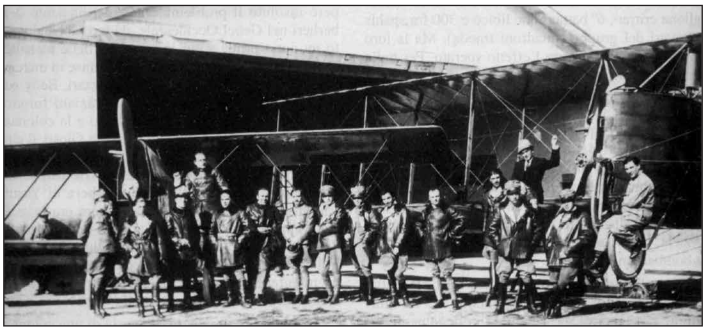
Meanwhile the Italian government was unusual amongst colonial powers in allowing an organisation sympathetic to the Libyan cause not only to exist, but to flourish. This “League of Oppressed Peoples” was supported by the veteran socialist and anti-fascist politician, Giuseppe Emanuele Modigliani, and had its own representative in Rome, Abd al-Hamid Sa’id. In Tripoli the League of Oppressed Peoples was headed by Abd al-Rahman Azzam, the future Egyptian Member of Parliament and head of the Arab League, and in Cyrenaica by Umar al-Shakia.

The year 1921 saw a significant change in the way the Italian government dealt with the situation in Libya. At this time the Italian Army was still suffering from an excessive number of Staff Officers who had, in effect, been “left over” from the First World War. The Army was also mired in efforts to restructure its colonial forces. Within Libya, meanwhile, there were an embarrassing number of Italian and Italian colonial troops being held prisoner by various Libyan groups. Furthermore, hostility between the local Arab and Berber inhabitants of the country was growing, particularly in the far north-west of Libya, around the largely Berber Jabal Nafusa highlands. Indeed, the Berbers seemed likely to abandon the nationalist cause and form an alliance with the Italians. The latter did make some military moves to stop an Arab advance into the Jabal Nafusa but when hostilities broke out between these two indigenous communities, the Berbers lost heavily. Their last significant stronghold in the Nalut region capitulated early in July, after which the Berber leader and the majority of his followers settled south of Zuwarah, under the protection of Italian garrisons in and around Tripoli. Others found refuge elsewhere.

This year similarly witnessed the Italian Army launching a determined campaign to retake control of all Tripolitania which had an estimated 550,000 inhabitants, mostly living in a narrow and fertile coastal strip. Local resistance forces armed only with rifles could rarely make an effective stand against a modern, increasingly mechanised and well organised Italian Army, supported as it was by air power. For the Italians the main difficulties came, of course, from desert terrain and climate. Furthermore, Italian supply convoys were still almost entirely confined to roads and the more passable desert tracks.



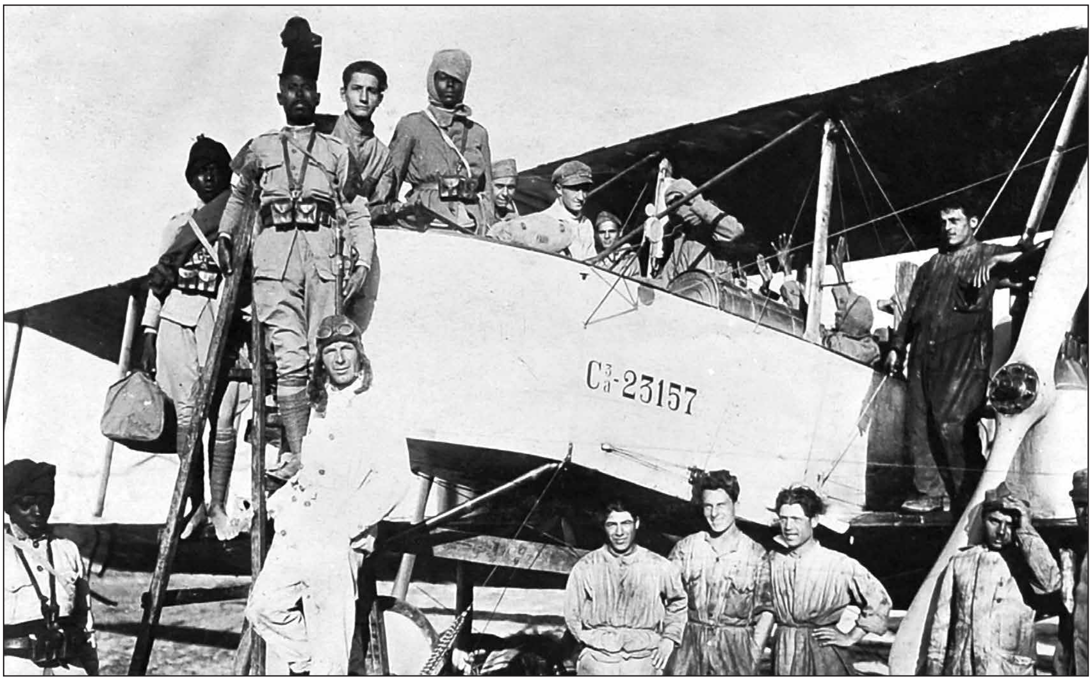
Bombs dropping on resistance-held Tarhunah on 2 July 1922, during Italian offensives to expand west and south, out of the Tripoli enclave. (Museo Storico Aeronautica Militare, Vigna di Valle)



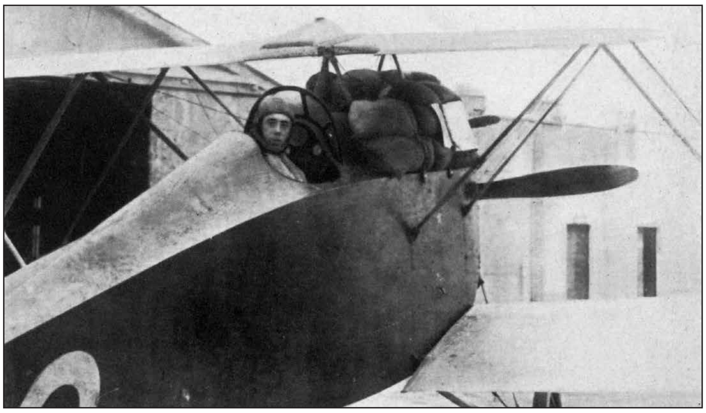
Pilots and officers of the Corpo Aeronautico Militare with an Ansaldo S.V.A. and a Caproni Ca.3 in front of one of the hangers at Millaha, Tripoli, c.1920-22. (Pedriali archive)

An Italian Ansaldo S.V.A. landed in the desert, sometime after 1923. The presence of an Italian officer, soldier, and technical personnel, plus a Libyan askari in Italian service and what might be Libyan tribal irregulars, could indicate that the aeroplane had made an emergency landing which necessitated a rescue mission. (via Paolo Varriale)

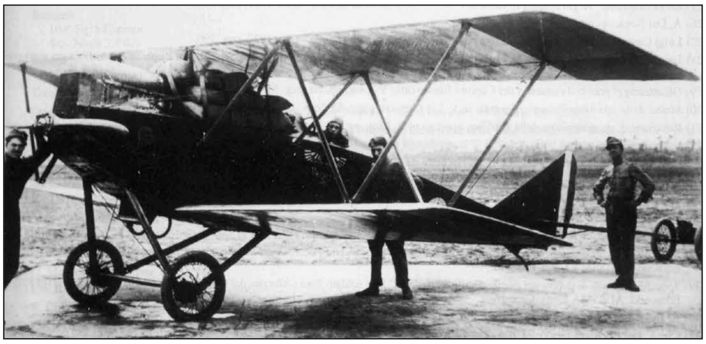
The Italians’ substantial number of rather old-fashioned aeroplanes, largely Capronis and S.V.A.s of First World War design if not vintage, proved remarkably reliable in the harsh conditions of North Africa and the Sahara Desert. As of 31 January 1921, the bomber and reconnaissance units in Tripolitania were under the overall command of Maggiore Luigi Biagini. These were No. 12 Caproni Sq. with four operational machines plus one non-operational, No. 89 S.V.A. Sq. under Lt. Armellini with nine operational single seaters plus two operational two-seaters. No. 286 flying boat Sq. at Tripoli was also included in this array, with four



A Caproni Ca.3 transporting Eritrean askaris, one of whom appears to be wounded, during the siege of al-Aziziya by Tripolitanian resistance forces in 1922. This is regarded as the first successful "air bridge" operation in aviation history. (Museo Storico Aeronautica Militare, Vigna di Valle)



An Ansaldo S.V.A. 5 of the 89th Sq. loaded with six sacks of flour during the siege of al-Aziziya early 1922. (Archivio Ufficio Storico SME)



Lt. Dalle Mole in his Ansaldo S.V.A. 5, loaded with sacks of flour for the besieged garrison of al-Aziziya in 1922. (Archivio Ufficio Storico SME)

operational FBA flying boats and three operational Macchi M.5 single seater flying boats.

The entire force was supported by workshops, which were currently assembling three Caproni Ca.3 bombers and two non-operational S.V.A.s, plus a supply warehouse with one non-operational and one no longer used Ca.3. There were also five non-operational and one out of use S.V.As. Both of these facilities were located in Tripoli. Meanwhile the personnel under Biagini's command consisted of four pilots and one observer for the Capronis, six pilots and three observers for the S.V.A.s, plus three pilots and an observer for the FBA and Macchi flying boats.

Within a few years these old-fashioned aeroplanes would be replaced by more modern types, often selected because of their suitability for Libya circumstances. Most notable was the highly effective Romeo Ro.1 which was a licence-built Fokker C.V-E reconnaissance and bomber two-seater which entered Italian service in 1927. The Italians had substantial numbers of aircrew, many of whom had combat experience from the First World War, and who were gradually trained in the advanced navigational skills required for desert warfare.

Once the Italians brought significant numbers of aircraft into play, the Libyan resistance's traditional ability to suddenly attack from the desert and then as swiftly retreat into the security of the sands was rapidly eroded. Maggiore Giovanni Spreafico was back in temporary command at the start of November 1921. He now had the six Caproni Ca.3s of No. 12 Sq. and the approximately twelve S.V.A.10 two-seaters plus S.V.A.5 single seaters of No. 89 Sq. under his command. On the other hand, No. 286 flying boat Squadron had been disbanded during the summer of 1921; its pilots being incorporated into No. 89 Sq.

In the meantime reliable aeroplanes with substantial range and effective radio communication gave the strategic and tactical initiative to the Italians. The latter were now not only able to find their foes but could follow the enemy's movements and sometimes block his escape routes. Direct and immediate communication between aircrew and ground forces meant that Italian soldiers soon became as effective in desert warfare as their opponents had been for centuries. The best Italian troops in such operations were considered to be battalions of Eritrean *askari* infantry, preferably moving around in lorries, supported by Italian armoured cars and local Libyan cavalry plus camel-riding *meharisti* mounted infantry. During the reconquest of Tripolitania, the Italian Army's elite mobile forces numbered only between 10,000 and 12,000 men, mostly Eritreans and Libyans under Italian officers. Meanwhile men from Italy itself provided specialist troops such as the crews of armoured cars and aeroplanes.

Maggiore Mario Stanzani was in command of the Tripoli air base while operations in the uplands of north-western Tripolitania were carried out from Zuwarah where No. 1 Flight had two Caproni bombers (450hp) and two S.V.A.s. These bombed Misratah and Zliten in July. In contrast, by late September a Flight at Hums had just one Caproni bomber (450hp) and two S.V.A.5s for missions over the central Jabal Nafusa. No. 1 Flight now sent two S.V.A.5 single seaters on temporary attachment to the Italian military encampment at al-Aziziya where the Italians had recently suffered a near disaster (see below). Meanwhile troops from Italy were mostly employed in garrisoning the coastal towns, ports and settled agricultural areas; a task in which they would later be supported by Fascist militias.

The actual reconquest of Tripolitania really began after the arrival of a new governor, the businessman and politician Giuseppe Volpi, who replaced Luigi Mercatelli on 16 July 1921. Volpi would eventually be rewarded with the title of Count of Misratah. He also founded the world-renowned Venice Biennale Arts Festival. In Libya, however, Giuseppe Volpi's first task was to revive the sagging morale of sometimes poorly supplied Italian garrisons. This was followed by a sudden offensive, which clearly caught the perhaps complacent Libyan resistance by surprise. It began at dawn on 26 January 1922, when a mixed force including Italian, Eritrean and local troops as well as police landed on the coast outside Misratah which they then seized. Within little more than a year Tripoli and its outlying settlements were firmly back in Italian hands, followed by the coast and northern cultivated lowlands between 1923 and 1925. Italian forces then took control of the central semi-desert regions, followed by the deep desert. This offensive took Italian forces to the borders of Fezzan by the end of the 1920s.

Italian Air Force aeroplanes took part in almost all stages of this campaign, but the most remarkable use of air power resulted from what might have ended up as an Italian defeat within a fortnight of their initial victory at Misratah. On 9 February 1922, the 10th Battalion Eritrean Askari was besieged in Aziziya when so-called "rebels" cut the railway line. On 19 March the railway line between Tripoli and Zuwarah was also cut while the followers of the resistance leader Farad Bey seized control of Zuwarah itself. The only means of communication between the approximately 1,000 troops in Aziziya and the main Italian forces in Tripoli was now by air, and so a handful of Caproni tri-motors, originally designed as long-range bombers during the First World War, transported fresh troops to the outpost while also evacuating civilians and wounded soldiers. In this they were assisted by some smaller machines. The numbers of people involved meant that this was the first real military airlift in the history of aviation.

General Pietro Badoglio, Chief of the Italian General Staff, arrived in Tripoli on 26 April to assess the situation, along with Col. Siciliani and Col. Riccardo Moizo who was now General Commander of the Italian Air Force. Moizo had been shot down and captured in 1912, during the original Italian invasion of Libya (see Volume One). Remarkable as this airlift was, it clearly could not supply the Aziziya garrison with all it needed for a prolonged siege. The available aircraft were simply too small and too few in number. In this emergency, three Caproni Ca.33 machines flew daily missions, along with half a dozen smaller Ansaldo S.V.A. single seaters and two-seaters. The Capronis usually carried sacks of flour, some of which were placed between the fuel tanks, others between fuel tanks and the central of the Caproni's three engine, and also in the front observer cockpit. By reducing the crew of three to just two pilots, and by halving the amount of fuel normally carried, a Caproni could theoretically carry up to 1,200 kilograms of supplies or several passengers.

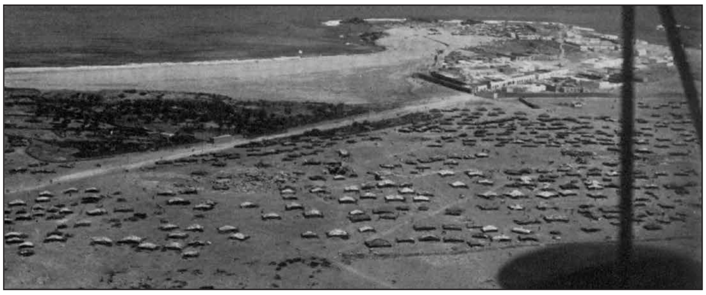
Meanwhile, the Ansaldo S.V.A. 5 single seater could carry six bags of flour (120kg) tied to the fuselage where the removed machine guns had been, and without unbalancing the aeroplane. Flying the machine in this condition was nevertheless far from easy, as Squadron Commander Lieutenant R. Armellini found when flour spilled into his cockpit from a broken sack. This forced him to land hurriedly, damaging his S.V.A. in the process. Another S.V.A. was damaged while landing on a rough track next to al-Aziziya fort, and one Caproni pilot, Sergente Zagni, was killed when two engines failed simultaneously. These Capronis also carried a number of civilians back to Tripoli, including women and children, as well as injured Eritrean soldiers and those whose term of enlistment had expired. The latter were replaced by a new company of Eritreans, plus their officers.

A resistance caravan or convoy in Cyrenaica, apparently of camels but perhaps including horses, being bombed by Italian aircraft in the 1920s. (Archivio Ufficio Storico SME)

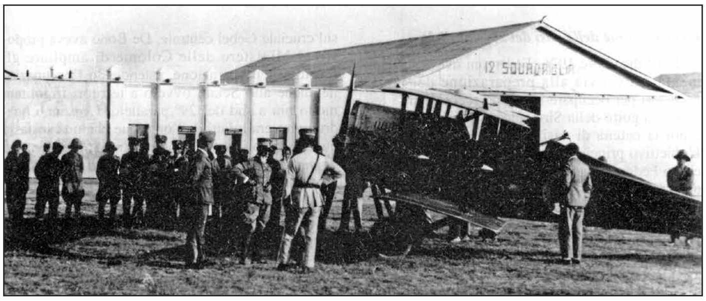
This remarkable airlift continued until 10 April when it was suspended pending the arrival of an Italian Army column commanded by a 39-year-old Colonel and enthusiastic Fascist named Rodolfo Graziani. By then the Capronis and S.V.A.s had made 335 flights, carrying 42 tons of foodstuffs, 3 tons of other materials, 278 soldiers – including 213 reinforcements from Tripoli to Aziziya – and 53 civilians. After Graziani's column lifted the siege, 40 wounded men from his force were also flown back to Tripoli. These missions clearly illustrated the possibilities offered by transport aeroplanes, especially in colonial campaigns, and provided a lesson that would not be ignored by other European imperial powers.

Following the relief of Aziziya, Col. Graziani's troops were joined by Berber volunteers. His and other Italian columns now set about taking control of the rest of Tripolitania, enabling much of the displaced Berber population to return to its homes. Aeroplanes again supported the majority of these operations, though most of the hard fighting seems to have been done by Eritreans of the Italian Colonial Army. Meanwhile aircrews often found themselves grounded by low cloud and sandstorms and they could only make nine flights during the crucial period from 9th to 14 September. On one such sortie a Caproni, undertaking a reconnaissance while also transporting mail and materials from Millaha to Hums on the morning of the 13th, spotted a "rebel" band in the open south of the Wadi Gsea. This they promptly attacked.

On 4 October, air reconnaissance again helped Italian ground forces catch their enemy by surprise, which remained a rare



The large and well-organised resistance military base at Talmita, on the coast of Cyrenaica near ancient Ptolemais, photographed from an Italian military aeroplane in the early 1920s. (Archivio Ufficio Storico SME)



General Emilio De Bono, Governor of Tripolitania from 1925 to 1928, inspecting an Ansaldo S.V.A. 10 of No.12 Squadriglia at Millaha, outside Tripoli. (Pedriali archive)

occurrence. Aeroplanes then provided close support to an assault upon entrenched enemy positions which contained three artillery pieces. The aeroplanes then helped knock out one of the enemy guns and reportedly inflicted over 370 casualties. The role of air power was again significant during a series of bitterly fought battles in October 1922, in an area east of the city of Tripoli. As the Italian "Eastern Column" under Col. Mezzetti reached the area of Misratah, and the "Jabal (Highland) Column" under Graziani (now promoted to the rank of General) pushed forward, the distances involved meant that aeroplanes were essential in maintaining communication with Tripoli. They also, of course, carried out reconnaissance and attacked the enemy whenever they could be identified.

Of the aircrew involved in these missions, the names of S.V.A. pilot Lt. Bacula, flying in machine no. 13228, was particularly prominent. Also, on 20 December, Capt. Darby with Sgt. Major Riboldias second pilot and Lt. Jacobelli as observer, landed their Caproni (no. 24488) next to Col. Mezzetti's column to evacuate two wounded Eritrean askaris and a sick Italian officer. On 22 December, these aircraft enabled Col. Mezzetti's column to prepare for, and then to defeat, a major enemy force; a success which effectively marked the end of Libyan resistance in eastern Tripolitania. As a result, many Libyan leaders in this area fled to Egypt, including Abd al-Rahman Hassan Azzam.

Since January 1924, the Italians had extended their operations into western Tripolitania in order to take full control of the frontier with French-ruled Tunisia and Algeria. This would entail the reoccupation of the oases of Sinawinn and Ghadamis which lay southwest of the Jabal Nafusa. In March and April there were several bloody clashes with dissident Arab tribal forces, especially on 16 April when an Arab counterattack almost overwhelmed an Italian position at Zintan. After a pause the Italians renewed their advance and on 15 June a column under the command of Major Galliani took control of Mizdah on the south-eastern slopes of the Jabal Nafusa.

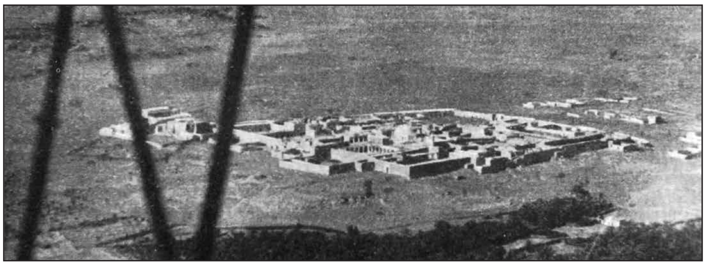
During these fiercely contested operations dissidents at Tabunia were bombed by Italian aircraft armed with gas bombs. The attack took place on 12 May 1924, after warnings had supposedly been issued by the Italian authorities. Whether or not such warnings reached their intended targets, it seems highly unlikely that the overwhelmingly illiterate "dissidents", consisting of tribesmen and their families, would have understood them.

The gas bombing sortie against the Tabunia area was intended to terrify the enemy and as a demonstration of strength to both sides. It was carried out by Caproni Ca.3 bombers flown by Lts. Ragnelli and Cantoni, who had taken off from Millaha during the afternoon of 6 May. Before leaving, the crew were briefed by Gen. Taranto who told them that the mission was primarily intended as a warning from the Italian government. Their aeroplanes were also to carry more than their normal maximum loads of 1,200kgs. According to Italian records, their cargo would be eight 12kg bombs and an 80kg liquid gas bomb, while the pilot's own report referred to a 240mm gas bomb. Otherwise nothing seems to be known about this weapon. However, the slight breeze encountered on take-off soon turned into a powerful *ghibli* or dust-laden wind from the desert, forcing the overloaded aircraft to land at Tarhunah where the weather kept them earthbound for a further five days.

On the morning of the 12th, Ragnelli and Cantoni took off and headed south, beyond the Wadi Sufagin. Over the hights of Bani Walid the Capronis again met haze and strong wind, but their pilots were reluctant to risk an emergency landing with gas bombs beneath their wings. They now lost sight of one another, so each pressed ahead alone, both fearing that the acute turbulence would dislodge their bombs. Conditions also made observation difficult. North of al-Ghariat, Lt. Cantoni saw a caravan of camels near Wadi Zam Zam, heading northward, but the Italian pilots' orders prohibited attacking targets north of al-Ghariat, so he flew on through difficult conditions until he reached the area of al-Ghariat itself. There he dropped his gas bomb, aiming at what the pilot described as "the lowest point of the oasis where the greatest effect seems most likely". On his return flight Lt. Cantoni dropped his 12kg explosive bombs on other targets, took some photographs, then returned to Tarhunah where he landed after being in the air for seven hours.

Meanwhile Lt. Ragnelli had been unable to find al-Ghariat, so dropped all nine of his bombs, gas and high explosive, in the area between Tabunia and al-Ghariat, aiming at buildings, horses and camels. Later reports indicated that one of the buildings damaged had been used by a dissident leader named Abd al-Nabi Bilshir. During this attack, Ragnelli's starboard engine stopped while the port-side engine was firing irregularly (the Caproni bomber had three engines), so he was unable to continue with an intended photographic reconnaissance of the area. Instead Ragnelli returned, flying against a strong north-westerly wind which obliged him to divert to Hums where he landed after flying for six and a half hours. For this controversial, but at the time still legal mission, both aircrews were rewarded; the officers receiving the Military Cross while the men were given special commendations.

How effective or deadly such attacks were remains a matter of debate.Given the limited technical capabilities of the two gas bombs that were dropped by the Capronis, it seems unlikely that the harm caused was widespread. The amount of liquid gas involved could theoretically kill within an area 40 metres across. On the day of the attack there was a high wind, which would have rapidly dispersed the toxic gas, greatly reducing its effect. It has also been suggested than an equivalent weight of high explosive bombs would have done much greater harm. Whether or not the Italian High Command carried out this gas attack on a largely civilian area primarily as a warning of what might happen if the supposed "rebels" did not submit, remains a matter if opinion. In the event, many of the dissidents in this part



The Sanussi religious centre at Jaghbub photographed from one of the Italian Romeo Ro.1 aeroplanes which flew numerous reconnaissance missions over the oasis between 18 and 30 January 1926. (Museo Storico Aeronautica Militare, Vigna di Valle)

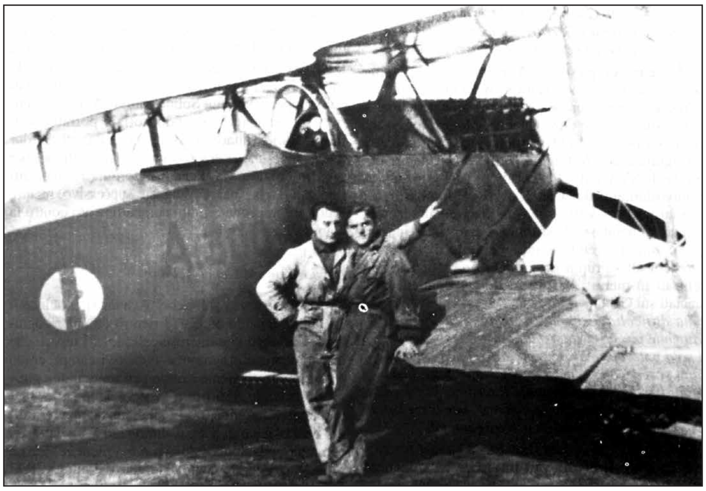
of Libya did abandon the struggle soon afterwards. Within a few days Italy also signed the Geneva Convention, which banned such toxic weapons, but only ratified the agreement four years later, on 3 April 1928.

While the struggle for the inland desert areas of Tripolitania continued, the Italians pushed eastwards towards Sirt, in order to control the coast of the Gulf of Sirt (Sirte) and link up with Italian forces in Cyrenaica. The first significant action in this theatre was made by dissident Libyan forces under Sa'id al-Nasser Ahmad and fellow leaders on 19 November 1924. As a result, their followers almost overran an Italian outpost at Bir al-Hasiadia, held by three Italian officers and 240 askaris of the 20th Eritrean Battalion. The arrival of Italian reinforcements forced the attackers to retire, but only after the garrison commander and 48 of his men had been killed. This near disaster convinced the Italian command in Tripoli to go on the offensive, Sirt town being taken just four days later.

The Italian High Command now had its sights on the strategic oasis of Jalu. This was not only one of the dissident forces' main bases and headquarters but was also an assembly point for supplies and other support coming from Egypt and the Sudan via Jaghbub oasis. Earlier in the year, on 3 June, a flight over Jalu by pilot Sgt. Sofia and observer Lt. Paolucci in a S.V.A. had shown that aerial attacks could be possible. Consequently, the Italian Air Force would support relatively long-range operations against Jalu in the autumn and winter of 1924, carrying out some remarkable raids under difficult conditions. Amongst the units available was No. 16 Bomber Squadron, recently transferred to Cyrenaica.

Unfortunately, these achievements were overshadowed by further use of poison gas, which had, of course, yet to be banned under international law. One of the most dramatic raids was in October, which proved to be a busy month for Italian airmen. On 11 October two Capronis of No. 16 Sq., each with a third additional fuel tank, took off from Benghazi and landed at Ajdabiya. Here they were armed with machine guns, 8,000 flechettes, as well as high explosive and gas bombs. The following day they took off and headed southeast across the Wadi al-Farigh, heading for the oasis of Jalu where the Cyrenaican leader Muhammad Ibn Idris al-Sanussi had his headquarters. It would entail a round flight of some 600kms and, not surprisingly, caught those on the ground completely by surprise.

Lt. Paolucci, who had previously flown over Jalu with Sgt. Sofia, took part as a navigator. It was just as well he did, for the Capronis soon found that thick mist obscured the ground so that their crews had to navigate by compass. But Paolucci knew his job and at 9.20 am Jalu came into sight, some ten kilometres ahead. The crews' orders were only to attack the oases of Jishirra and Libda where enemy encampments were located, along with stores of munitions and food. Nevertheless, it took the Capronis some time to identify and attack these locations and, despite flying at an altitude of 1,200 metres, one aeroplane was hit by five bullets fired from the ground.

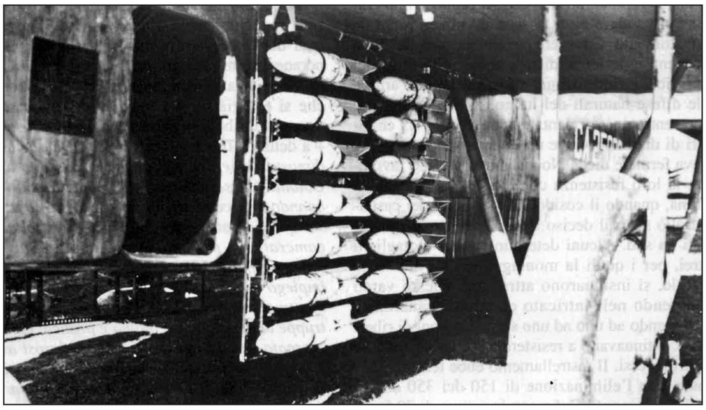


Following Mussolini's takeover of the Italian government in 1922, the Fascist insignia consisting of a bundle of canes enclosing an axe was added to aeroplanes of what became the Regia Aeronautica on 28 March 1923, as seen on this Ansaldo A.300 in Libya. (Pedriali archive)

Regia Aeronautica personnel and officers of the Royal Corps of Colonial Troops in Tripolitania, in front of a Romeo Ro.1 in 1928. (Vincent De Gaetano archive)

According to the mission's incomplete records, 2,000 flechettes and 60 bombs were dropped on Jishirra, the remaining flechettes and bombs falling on Libda. There are no records concerning the type of gas bombs dropped by the aeroplanes, but it appears they were of the old type previously used in western Libya. They did not include mustard-gas bombs as the latter had yet to arrive in the country. Later information indicated that 35 people were killed on the ground at Jalu and neighbouring Jakharrah, including five *Ikhwan* "brothers" – in other words Sanussi fighters. Many people reportedly now fled to Jaghbub while others tried to flee further east, into Egypt, but were reportedly stopped at the frontier by the Egyptian authorities,

News of this operation was announced the following day by Pietro Lanza di Scalea, Mussolini's Colonial Minister and a member of the Fascist Grand Council. Lanza di Scalea claimed to have suggested such action in the first place. Around the same time the Italian press office in Cyrenaica announced the raid to the world, but this time the Italian government was furious at such a public disclosure. Indeed, Lanza di Scalea denounced Gen. Mombelli for having gone against the international agreement of February 1922, which proposed banning such weapons. In reality Lanza di Scalea had just learned that the dropping of gas bombs would anger the United States, so Mombelli was advised to keep such news out of the press. Henceforth mention of poison gas was removed from all accounts of the bombing of Jalu.



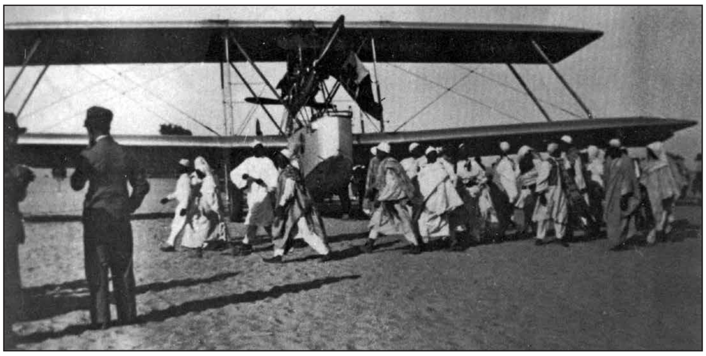
Bomb-racks on the sides of a Caproni Ca.73 based in in Libya in the later 1920s. Hard use in a harsh climate meant that by early August 1928, the Italians only had one operational Ca. 73 in Tripolitania. (Pedriali archive)

On 3 July 1925, Giuseppe Volpi was replaced by General Emilio De Bono as governor of Tripolitania. In April Mussolini himself had made a formal tour of inspection, still wearing a bandage on his nose following an assassination attempt by the Irishwoman, Violet Gibson. Things were initially rather quiet in Tripolitania, though there were some clashes with Arab dissidents from April to August. The following years saw almost no military action in Tripolitania, though there were what were described as "police actions" to secure important water-wells between December 1927 and February 1928. The main focus of both Italian and dissident hostilities had shifted to the east and southeast of Libya. To some extent a decision in 1927 to split Italian North Africa into two colonies reflected the fact that Tripolitania was now at peace – at least from the Italian point of view – while Cyrenaica remained a war zone. Such formal separation would remain in place until 1934. Meanwhile, on 21 January 1929 Pietro Badoglio was again appointed governor of both territories, arriving in Tripoli three days later.

The controversial Italian acquisition of territory from Egypt during the 1920s (see Volume Four) added the substantial oasis of Jaghbub to Italian Cyrenaica and, more importantly from a military point of view, enabled the Italian Army to cut what had been a major supply route between Libyan dissidents and their sympathisers in Egypt. In practice the Italian occupation of Jaghbub was carried out in two phases. The first established two positions in the desert between Bardiah on the coast and Jaghbub, after which the second took over the oasis itself. There were also diversionary actions on the edges of the dissident-held Jabal Akhdar (Green Mountain) uplands to prevent the Libyan leader Umar Mukhtar sending reinforcements to Jaghbub. This he was reportedly preparing to do in January 1926, though in the event Umar Mukhtar did not try to save Jaghbub. Before the Italian column set off, Italian aeroplanes flew 62 hours of reconnaissance over their intended route and over Jaghbub itself between 18 and 30 January 1926. Other aeroplanes supported a widespread search for dissident forces in the Jabal Akhdar uplands, during which the S.V.A.10 of Lt. Lembo suffered a broken crankshaft and had to make an emergency landing in the middle of a dissident area. However, both the pilot and observer walked to safety through the desert and the aeroplane was subsequently recovered.

On 1 February a substantial Italian Army column under Col. Ronchetti set off from Umm Sa'ad near the coast. It consisted of 2,467 men, 36 armoured cars, 305 trucks, 115 baggage animals, 4 artillery pieces and 60 machine guns. This column was supported by a S.V.A.10 squadron and a squadron of Capronis Ca.3 bombers, both from the Mixed Group based at Tobruk under Capt. Savoini, plus another unit of S.V.A.10s from the Nucleo Frontiera Orientale under Capt. Mazzini. The latter was based west of Bir al-Shaqqa oasis which lay just inside Egyptian territory.

The 12th Squadrigia in Cyrenaica around 1927, showing (from right) Caproni Ca.73s with Lorraine engines and older Caproni Ca.3s facing Ansaldo S.V.A.s. (Museo Storico Aeronautica Militare, Vigna di Valle)



Libyans visiting Benghazi (Berka) aerodrome around 1928, in front of one of the Regia Aeronautica's Caproni Ca.73 bombers decorated with a large Italian flag. (Franco Fortunato photograph, Pedralia archive)

On 5 February Italian aeroplanes appeared over Jaghbub but merely dropped leaflets announcing the imminent arrival of an Italian force. They and the other reconnaissance flights reported no hostile activity in the oasis and were not apparently fired upon. Two days later, at noon, the Italian column took over Jaghbub oasis without a shot being fired. The area was scoured for dissident opposition, but none was found. By the end of this operation the Italians had flown 110 hours but had suffered four accidents. The most serious was on 12 February when the S.V.A. of Lt. Vercesi had crashed while carrying messages between Tobruk and Jaghbub, both pilot and passenger being killed. Meanwhile a powerful desert wind blew down a recently erected temporary hanger at Jaghbub.

Taking control of the oases south of the Gulf of Sirt and the Cyrenaica uplands – the Inner Oases as they were known – proved much more difficult and was not attempted until 1928. By that time more modern aeroplanes had been sent to Libya. The Italians' objective was to extend their authority approximately as far as Latitude 29 degrees north. The first phase of the operation involved taking complete control of the coast of the Gulf of Sirt, part of which was still in dissident hands. This would be carried out in January through a pincer movement by two columns; one under Generals Graziani and Pintor pushing east from Tripolitania while the other under General Mezzetti and Col. Maletti pushed south-west from Cyrenaica. Three aeroplanes were employed for liaison between these two forces; a twin-engine Caproni Ca.73 being allocated to the western force and a pair of single-engine Ansaldo A.300-4 machines to the eastern force. The main striking power from the air was provided by Caproni Ca.73 bombers and versatile Romeo Ro.1 multi-purpose machines.

Initially these forces achieved success with relatively little fighting and few casualties. The Italian intelligence service now learned from prisoners that the "rebel" leader Salah al-Atiyush intended to escape the Italian pincer movement at Nufila by withdrawing inland towards the mountains of the Haruj al-Aswad, probably via Mirduna, Tajrift and Zillah. Graziani speeded up his advance on Nufila during the night of 8-9 January, seizing it without resistance the following day. Eager to catch the retreating dissidents, Graziani sent cavalry towards Wadi Ajar while aeroplanes scoured the area. The Italian *spahis* only managed to make contact with the retreating enemy rearguard but the enemy was bombed from the air in attempts to fragment the retreating force. Numerous bombing sorties were also launched by the Ca.73 and Ro.1s from 8 to 12 January, despite worsening weather.

According to some reports, Italian aeroplanes again dropped asphyxiating gas, including phosgene, as well as high explosives. On another occasion an urgently needed convoy carrying fuel for Col. Maletti's armoured cars went astray, and to stop it falling into enemy hands, Lt. Caselli landed his S.V.A. next to the fuel trucks to warn of the error. Subsequently Lt. Biani, a pilot supporting the column from Tripolitania, described how pilots often landed next to such columns to bring or collect messages, and how troops on the ground were trained to communicate with aeroplanes by laying strips of cloth on the ground in various patterns. These cloths were issued in white and red, to be used according to the background colour of the terrain, the system proving very efficient

The two main Italian columns had yet to link up, partially because of adverse weather, but the ruthless Gen. Graziani was now put in command of both. The second phase of this campaign involved Italian forces pushing south into the desert. So, on 4 February, Graziani brought all his available men together into one force, including Italians, Eritreans and Libyans as well as specialist, fast moving desert troops under a member of the Italian Royal family. This was Amedeo of Savoy, Duke of Apulia, who had recently qualified as an Air Force pilot. The aim was to defeat Arab dissidents in the three oases of Sukhnah, Hun and Waddah, which together formed the greater oasis of al-Jufra. The operation started on 9 February and again achieved rapid success before moving east, towards Zillah. This time Graziani refrained from using aircraft so that the opposition would have no warning of his forthcoming attack. However, the surprise was not complete and the dissident leader Abd al-Jalil Saif al-Nasir escaped just two hours before the Italian assault, fleeing south into the bleak Haruj al-Aswad hills.

A larger number of the enemy were nevertheless reported to the north, around Tajrift, and so, without authorisation from Italian military headquarters in Tripoli, Graziani promptly struck out across unexplored desert. He did so with limited food supplies in a dangerous move which involved night marches. It resulted in the Italian force being ambushed and almost surrounded in a narrow valley on the outskirts of Tajrift oasis. The resulting battle was singularly fierce, with heavy losses on both sides. The Eritrean and Libyan askaris of the Italian colonial army proved notably determined and would be commended once the oasis was taken. In fact the battle of Tajrift is widely seen as the biggest success in Gen. Graziani's chequered career and was followed by the third phase of the "29th Parallel Campaign", a ruthless mopping up operation to liquidate remaining pockets of resistance which continued until 30 May 1928.

The focus of military operations now moved back to Tripolitania where, in July, the Italians decided to extend their authority beyond Mizdah. However, they were hampered by blistering heat, sandstorms and a dissident attack upon an Italian desert patrol force of 300 men on 12 July. The latter were almost overwhelmed before a relief force, supported by aircraft, reached them on the 17th. To stop further such enemy attacks, the Italians created an irregular force of 1,000 Libyan troops under an indigenous officer, Capt. Khalifa Khalid, plus two local leaders who would be supported by Italian aeroplanes in case of need.

By this time many of the aeroplanes based in Tripolitania were in need of overhaul following intense activity during the preceding months. This was particularly true of their engines. As Capt. Mazzini recalled, on one occasion the rear propellor of his twin-engined Caproni Ca.73 was hit and the aeroplane proved unable to continue with just one engine. He was not alone in complaining that, in the climatic conditions of Libya, the Ca.73 was unable to stay aloft if one engine failed. Meanwhile a report dated 8 August 1928 gave the Italians' available air strength in Tripolitania as just one operational Ca.73 of No. 12 Sq. and two Ro.1 machines of No. 89 Sq. The non-operational machines were four Ca.73s of No. 12 Sq. and two Ro.1s of No. 89, although five more Ca.73s would soon be delivered.

The summer of 1928 saw an upsurge of increasingly effective dissident attacks against small or isolated Italian positions and patrols in the recently conquered areas of Jufra and Sirtica (the southern coast of the Gulf of Sirt). By now the main dissident centres in the western half of Libya were south of the 29th parallel, lying along the southern fringes of Tripolitania and in the vast desert province of Fezzan. From here, throughout much of 1929, the "rebel" leadership kept up resistance to Italian occupation. In response, the most effective Italian counterstrokes usually involved close air support, against which the dissident forces had no real defence.

In preparation for a proposed campaign to take control of Fezzan, Governor Badoglio decided to disarm desert tribes which were already under Italian control, believing that even if they were currently neutral, they might cause problems in the future. Unfortunately, the possession of weapons had been central to desert tribal culture throughout recorded history. The Ottoman Empire had recognised this fact and had not tried to disarm Libyan tribes, nor even to tax their possession of firearms. Badoglio's order therefore caused almost immediate problems. Nevertheless, it resulted in the confiscation of 4,830 rifles, 109 other guns and 16,324 cartridges.

Meanwhile the supposedly liquidated resistance in Tripolitania remained active at a low level, and further Italian punitive operations were needed in the summer and autumn of 1928. On at least one occasion the Italians had to abandon an outpost. On other it was only the arrival of Italian aeroplanes on 18 October which, having identified and attacked the local dissidents' positions, prevented a unit of pro-Italian irregulars at Bir al-Ait from being overwhelmed. In fact the seriousness of the situation at Bir al-Ait had been identified during a reconnaissance by two Ro.1s and a Ca.73 the previous day, one of which flew low in order to see exactly what was happening and was consequently damaged by rifle fire. On the 18th, four Italian machines bombed the dissidents, reportedly wounding one of their leader's brothers, and on the 19th aircraft dropped supplies to the pro-Italian irregulars, including 6,000 cartridges.

In January 1929 the separated colonies of Tripolitania and Cyrenaica were once again reunited under the governorship of Marshal Pietro Badoglio. He now issued a proclamation, telling the people of Libya to choose between submission to Italian authority or extermination. Furthermore, Badoglio informed the Italian government in Rome that the only way to ensure peace in Libya was to occupy the entire territory up to the borders of neighbouring Egypt, the Anglo-Egyptian Sudan and French ruled territories in what are now Tunisia, Algeria, Niger and Chad. In other words, the Italians had to conquer Fezzan. This remarkably ambitious operation would start on 10 November 1929.

Following missions over the Jabal uplands of Tripolitania, the Romeos and Capronis had needed major overhaul which was carried out at Tripoli (Millaha) aerodrome. Some of the necessary material had been purchased locally, while the more sophisticated elements come from Italy. Most of those carrying out the work were drawn from available military craftsmen, supported by some specialists sent by the machines' manufacturers. Particularly attention was paid to the troublesome engines, and as a result the air units which supported the conquest of Fezzan were very different to those which Col. Ferruccio Ranza found when he took over in Tripoli during 1928.

No. 12 Bomber Sq. had been partially re-equipped with Caproni Ca.73ter, also known as the Ca.74 and later redesignated as the Ca. 82, in which the unsatisfactory 410hp Lorraine engines had been replaced by 510hp Isotta Fraschini engines. There were also additional Ro.1 machines, with more on the way. These had been specially upgraded for colonial service by increasing their fuel capacity and thus extending endurance from eight to twelve hours. Their armament consisted of a machine gun and racks for forty 2.4kg bombs instead of the previous twelve 12kg bombs. The modified Ro.1 also included a stretcher for a wounded man, plus 20 litres of water for use in emergencies. On 15 November 1929, Gen. Graziani could call upon the air resources in Table 6:

TABLE 6: ITALIAN AIR RESOURCES AVAILABLE ON 15 NOVEMBER 1929

LOCATION	SQUADRON	AIRCRAFT
Hun (Comando Aviazione de Manovra)	Fezzan Squadron	Nine Ro.1s
	Command Section	Two Ro.1s
	No. 12 Sq	Five Ca.73s and two Ca.97s
Sirt	First Reserve Sq	Three Ro.1s and one Ca.73
Tripoli	Second Reserve Sq	Nine Ro.1s and two Ca.73s
Two additional Ca.97s were also due to arrive from Italy within a few weeks		

To further increase efficiency, an advance depot had been established at Sirt and an advance workshop at Hun with 20 spare engines, plus spare wings, tail units, propellors, other mechanical parts and "consumable" spares in anticipation of a five month campaign. A thousand 300 litre fuel drums had been purchased, ready to set up fuel dumps in the desert.

Gen. Graziani was again placed in charge of the campaign, which, by using the Italian Army's considerable technological superiority and increasing organisational skill, managed to take control of the widely separate dissident centres of Birak, Sabha and Murzuq in only four months. In February 1930 resistance in Fezzan was thought to be over, while dissident leaders had apparently fled across the frontiers. It had cost the Italian state more money than it could afford, but Mussolini was as determined as Badoglio and Graziani that Italian arms should succeed. The advance would start from three separate points: Hun in al-Jufra oasis in the east, Shuwayrif in the centre, and Daraj in the west. The forces used would be the most mechanised available. Those of the main central column under the Duke of Apulia included a substantial *Autogruppo* (four sections with 268 lorries), with the machine gun squadron and armoured cars of the 17th Eritrean Mixed Battalion, plus Italian artillery, which included light pieces carried by camels and all the necessary support elements.

Birak surrendered on 5 December, after which Graziani ordered the eastern column, which had yet to leave Hun, to advance. Setting off the following day, it entered Birak with 210 lorries and 4,000 tonnes of supplies three days later. On 10 December the Duke of Apulia's force set off towards the sands of Zillaf (now a nature reserve), just south of Sabha. Meanwhile Graziani ordered an aerial reconnaissance of the area to assess whether it was passable by motorised transport. As a result, he decided to make a detour to the east, around the sands. In the later afternoon of 14 December Sabha was occupied. To confuse the enemy, Graziani spread a rumour that his next move would be against Murzuq, meanwhile he sent aircraft to reconnoitre in the direction of Awbari. In reality the Italian commander had decided to delay a further advance towards Murzuq.

The western Italian column set out on 2 January 1930, the specialist Saharan troops being accompanied by technicians from the Regia Aeronautiuca who were to support the aeroplanes which accompanied the column. Shortly before reaching Umm al-Aranib, however, it became clear that motorised transport could progress no further into the loose sands, so everything including aviation fuel, lubricants, bombs and spare parts, was loaded onto the camels. Meanwhile on 4 January, to ensure that the central column had air support, No. 89 (Ro.1) and No. 12 (Ca.73) Squadriglia moved from Hun to Sabha, being replaced at Hun by the Mixed Squadron at Sirt. A Section or Flight of four machines under Capt. Mazzini was also detached from No. 89 Sq. to be directly attached to Gen. Graziani's column.

Having crossed the vast, waterless Hamada al-Hamra, and brushed aside resistance 40kms north of Awbari, the Western Column took control of that oasis on 1 February, an Italian supply convoy having already arrived the previous day from Sabha. Thereafter the Italians sent out smaller mobile units to pursue and disperse retreating dissidents. The small oasis of al-Uwaynat, close to the newly agreed frontier with Egypt in the deep south-west of Libya, was occupied on 11 February. Aircraft also harried the enemy, bombing their camps and groups on the 13th. This pattern continued until April, when a unit of Italian specialist desert troops crossed the previously unexplored Haruj Mountains, effectively bringing the conquest of Fezzan to a close.

The Italian campaigns in Tripolitania and Fezzan had not been easy, but the main difficulties came from the desert terrain and climate. In Cyrenaica the Italians faced more determined resistance in addition to problems posed by desert warfare. The Italian and British governments had already reached an agreement with the Sanussi, known as the Modus Vivendi or "Pact of Akrama", back in April 1917 (see Volume Two).This enabled Italy to avoid additional military commitments in Cyrenaica in return for supplying the Sanussi with money and weapons, but it had left the small Italian garrisons on the coast effectively surrounded by Sanussi forces on the landward sides. The Modus Vivendi of Akrama lasted until 1922, by which time Gen. Vincenzo Garioni had been replaced as governor of Cyrenaica by the highly experienced Giacomo De Martino, previously governor of Somalia and then of Eritrea. De Martino died on 23 November 1921 and was succeeded by Luigi Pintor, one of the men who had negotiated the original Modus Vivendi.

The quietness of this "front" was reflected in the fact that, according to a report of July 1922, Italian aviation in Cyrenaica consisted of just one operational aeroplane, a SAML of No. 104 Reconnaissance Squadron, based at Benghazi (Berka) under Capt. Mario Cebrelli (in command since 7 April 1922). Nominally this unit was supposed to be equipped with SAML (Societa Anonima Meccanica Lombarda) and S.V.A. machines.

In October 1922 Pinto was replaced by a very different personality, Gen. Luigi Bongiovanni the first governor of Cyrenaica to be installed by Italy's new Fascist government. He would remain in post until May 1924, but the fact that there would be changes in Italian government policy was apparent as early as November 1922. Cap. Alberto De Bernardi was now in command of No. 104 Sq. which had been redesignated as a reconnaissance and bomber unit, its nine S.V.A.s having arrived on 10 November. One would, however, be destroyed in an accident on 8 January 1923, with the death of the CO, Cap. De Bernardi.

The subsequent breakdown of the Modus Vivendi of Akrama was blamed by each side upon the other and was probably inevitable with Mussolini now in charge of Italy. But instead of initiating hostilities, the Italian authorities tried to use their military successes against Ramadan al-Shtaiwi and other dissident leaders in Tripolitania as a lever to persuade the Sanussi leadership to accept Italian demands. In this they failed. Sayyid Rida in Cyrenaica had been given authority by his cousin, Idris al-Mahdi al-Senussi who was currently in exile in Cairo. However, there was a widespread fear amongst the indigenous inhabitants of Cyrenaica that the aggressive new government in Rome intended to remove all those privileges won by the Sanussi during years of struggle against colonial rule. On the other side, the Italian authorities anticipated that these people would remain neutral in any serious war between the Sanussi and the Italian Army.

On 6 March 1923 Gen. Bongiovanni announced that the new Italian government would comply with the Modus Vivendi of Akrama but would also insist on complete control over some previously shared areas. Even as he was speaking Italian forces took the Sanussi by surprise and seized control of several locations shared by the Italians and Sanussi, including Akrama itself. In response the Sanussi seized other shared areas, evicting or imprisoning the Italians found there, perhaps without the authorisation of Sayyid Rida.

The time for negotiation seemed to have passed. The forces available to Gen. Bongiovanni to complete any conquest of Cyrenaica were nevertheless limited. They consisted of eleven infantry battalions, including Eritrean and Libyan troops, two squadrons of Libyan cavalry, two mountain batteries, two artillery companies and two engineer companies, supported by a mechanised autogruppo of twelve *autosezioni* equipped with armoured cars. Bongiovanni also had two squadrons of aeroplanes, No. 3 Sq. with four old fashioned Ca.3 bombers and No. 14 with eight S.V.A. reconnaissance and bomber machines, of which a Section of four were sent to Tobruk in May. The late Capt. De Bernardi had apparently not yet been replaced as commander of the air units in Cyrenaica.

Facing Gen. Bongiovanni, the Senussi were believed to have a regular force of 2,000 *Muhafizia* soldiers with six to eight machine guns, six mountain artillery pieces, plus about 1,000 modern rifles which could be distributed amongst volunteers. Furthermore, the local population was quite well armed with a mixture of rifles, old and new, and was capable of fielding from 3,300 to 4,000 men.

On 6 March 1923 Italian air units began the new Cyrenaica campaign; one Caproni and two S.V.A.s bombing al-Abiyar while two S.V.A.s accompanied Italian ground forces and provided reconnaissance. The S.V.A.s continued this work while trying to maintain contact with ground forces by using portable but unreliable radios and old-fashioned carrier pigeons. Weather conditions could be extremely dangerous, as Lt. Gambino found when he flew into cumulus cloud on 8 March. The turbulence was so severe that Gambino lost control and his observer, Lt. Mario Briganti, was thrown out of his cockpit and killed.

The main Cyrenaica ground campaign began with the Italian occupation of territory south of Benghazi and around the southwestern fringes of the fertile Jabal Akhdar uplands. This began on 21 March 1923 when two Italian columns left Suluq and Qaminis, seized several locations and defeated a local Arab force near Zawiyat Masus. The most effective forces again seemed to be Eritrean askaris supported by cavalry and Fiat armoured cars. Together they had significantly reduced Sanussi territory even before an Italian force under Gen. De Gasperi set out on 19 April to take Ajdabiya on the south-eastern corner of the Gulf of Sirt. Four columns were to converge on Ajdabiya, one of these being a reserve force. After stopping for the night at four different locations, they set off again the following morning and, after breaking through determined Sanussi resistance on the 21st, took control of Ajdabiya and raised an Italian flag over the house of Sayyid Muhammad al-Idris himself. This action marked the formal end of the Modus Vivendi of Akrama. On the other side of the Jabal Akhdar, Italian forces tried to monitor all traffic across the frontier between Libya and Egypt, but Umar Mukhtar had already established strong links in the neighbouring region of Egypt, lying between the Mediterranean coast, the virtually impassable Qattara Depression and Siwa oasis.

May found Italian forces operating in virtually unknown and unmapped territory south of the Jabal Akhdar. Strong patrols explored the area and attempted to take control of wells and other important locations. One such was the unit of armoured cars commanded by Capt. Tilgher which had been sent to capture a mounted enemy formation under Abd al-Salam al-Shizza, reported to be at Bir Abu Haraja. Capt. Tilgher's force was also to escort a force under Major Melelli, largely of Eritreans, which was to occupy and garrison Marsa al-Burayqah. However, air support and the presence of the Italian warship *Berenice* both failed to materialise because of adverse weather as a ghibli or dust storm from the desert had ground the aircraft.

On 10 June the motorised column, which included 37 armoured cars, arrived at the wells of Bir Bilal but were ambushed by an estimated force of 400 Arabs (or 700 according to other sources) who caught the Italians in a deadly crossfire. Six armoured cars were immediately put out of action by accurate shooting against their wheels. Only a few dozen Italian and Eritrean troops escaped the resulting massacre, fleeing aboard lorries and pursued by enemy horsemen. This catastrophe resulted in the deaths of five officers, 40 Italian soldiers and 32 Eritrean askaris. Those wounded who failed to escape aboard the fleeing lorries were slaughtered. Along with these casualties, six armoured cars were destroyed or captured by the Sanussi, along with 17 lorries, 18 machine guns including those in the armoured cars, 80 rifles and an artillery piece. Major Melelli, who reached al-Burayqah, learned of the clash and decided to try and support the armoured cars but was himself attacked at Abu Jrada the following morning. Here around 800 Sanussi troops and their local supporters forced Melelli to retreat back towards al-Burayqah. As a result, several more Italian lorries were destroyed, along with at least one further armoured car. Major Melelli was also killed, along with six officers and 244 Eritrean soldiers.

While this two-day victory over the Italian encouraged the Sanussi resistance and their supporters, it also provoked a determined Italian response resulting in a number of bloody clashes over the remaining months of 1924. The following year saw a series of Italian successes, as well as some setbacks, but by end of 1925 the resistance leader Umar Mukhtar's prestige had been significantly eroded. As a result, many tribal leaders came to terms with the Italian occupation. From 1926 onwards the Italian Air Force probably became the dominant factor in the continuing struggle in Libya, enabling Italian forces to locate their enemies anywhere, even in the furthest and deepest desert. The open deserts paradoxically became some of the easiest areas for the Italians to dominate.

In January 1926 Italian air strength in Cyrenaica formed part of a Mixed Aviation Group commanded by Maggiore Virgilio Sala with his headquarters at Benghazi (Berka). His formidable force is shown in Table 7.

The total consisted of 34 officers, 97 NCO and 243 soldiers from the Italian Air Force, plus six Army officers of whom one was a pilot and one an observer.

There is no available information about Italian air strength in Tripolitania during January 1926, but by May this consisted of the headquarters based at Tripoli (Millaha), under Maggiore Jannoni Sebastianini Fabio since 1 January. Also based at Tripoli (Millaha) were No. 1 Sq. equipped with Caproni bombers, No. 89 Sq. with S.V.A.s, and an Aviation Warehouse. At each of the secondary aerodromes of Bani Walid, Mizdah, Misratah port and Sirt there were also a hanger and a storage warehouse. Meanwhile No. 12 Reconnaissance Squadron was on its way to Tripolitania with its seven aeroplanes.

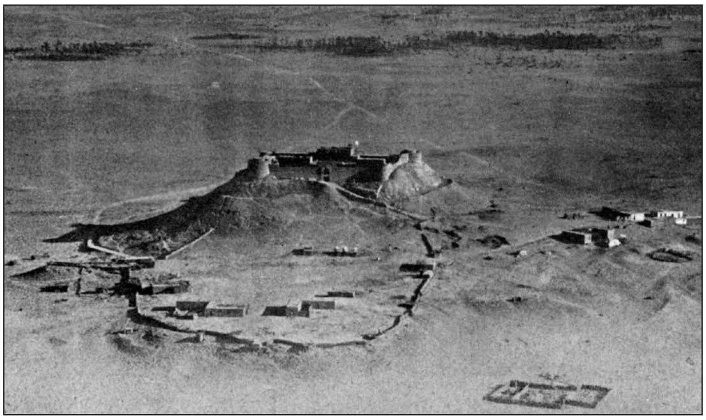
TABLE 7: ITALIAN AIR STRENGTH IN CYRENAICA, JANUARY 1926

LOCATION	SQUADRON	TYPE	COMMANDER	NOTES
Benghazi (Berka)	No. 16 Bomber Sq	Caproni Ca.3	Lt. Alessandro Borello	
	No. 26 Reconnaissance Sq	S.V.A.10	Lt. Angelo Tessore	
Apollonia (now Marsa Susa)	No. 23 Bomber Sq	Caproni Ca.3	Lt. Cesare Mari	This unit with only two machines was disbanded on 15 March 1926
Marj	Section of No. 26 Sq	S.V.A.10	Lt. Arrigo Bellia	
Ajdabiya	Section of No. 16 Sq	Caproni Ca.3	Lt. Andrea Locamo	
Tobruk	Mixed Group (consisting of the two units below)		Capt. Arturo Giordano	This Group was also disbanded on 15 March
	No. 23 Bomber Sq	Caproni Ca.3	Capt. Arturo Giordano	Two aircraft
	No. 37 Reconnaissance Sq	S.V.A.10	Capt. Alberto Savoini	Eight aircraft
Al-Shaqqa	Comando Nucleo Aziazione Orientale (consisting of the following)		Capt. Umberto Mazzini	Originally formed for operations towards Jaghbub but was disbanded on 15 March 1926
	Section	S.V.A.10	Lt. Camillo Gentile	
			Army Lt. Angelo Banchieri	Intended for Jaghbub
Umm Sa'ad	Section	S.V.A.10	Lt. Ezio Verceri	

Only the rugged and in places wooded region of the Jabal Akhdar continued to provide a viable arena for Libyan guerrilla resistance to continue. This huge area, almost as big of Sicily, proved much more difficult for Italian forces which had come to rely upon aeroplanes and motorised vehicles. Even air reconnaissance failed to identify the small groups of Libyan mujahidin guerrillas who could bypass Italian positions, infiltrate their lines and hide amongst a supportive local population. The latter also tended the wounded and replaced the fallen. This struggle would last several years and was eventually won by the Italians after a new Lieutenant Governor, Gen. Rodolfo Graziani adopted brutal tactics which, if not strictly genocidal, certainly earned him the title of "The Butcher".

Before Graziani took charge, the conflict had consisted of raids and clashes between Italian and resistance forces, the most effective of whom were still the uniformed Muhafizia Sanussi regulars. The latter were involved in a significant clash when they emerged from the Wadi Farij on 13 April 1926. During that month a Section of S.V.A.10s from No. 26 Sq., based at al-Marj, flew approximately 30 reconnaissance missions over Jabal Akhdar, as well as carrying out bombing and strafing missions in support of Italian ground forces. Similarly, the two Capronis based at Ajdabiya conducted a determined bombing campaign, which convinced the enemy leaders to pull back more than 30 kilometres from the Italian base.

The following month, May 1926, saw the Italians focussed upon strengthening their control of the northern part of the frontier with Egypt. However, at the end of June an Italian military convoy which included a small number of civilians, some of them women, was attacked on the road between Apollonia (Marsa Susa) and Cirene. Twenty-eight members of this convoy were killed, including the entire police escort. On 22 July 1929 an Italian Air Force observer, Lt. Guglielmo Azzo, was hit by rifle-fire from the ground, during a low-level strafing mission, and a total of six machines were slightly damaged during these operations. Four other S.V.A.s had to make emergency landings in enemy-held territory after being struck by ground fire; each being destroyed by their crews before escaping to safety. Less fortunate were the crew of a Caproni Ca.3, which made a bad landing near Shahhat (Cirene), the pilot Sgt. Carlo Roveda being killed. On 2 December a decorated ex-soldier and by now committed Fascist politician, Attilio Teruzzi, took over as Governor of Cyrenaica. He remained in this position until the end of 1928 when he was replaced by Marshal Badoglio. The situation facing Teruzzi at the start of 1927 was not a particularly satisfactory one, so he decided to eliminate what were described as "rebel



The fort of Sibha in the Fezzan photographed from the air in 1930. (Archivio Ufficio Storico SME)

enclaves" within Italian controlled territory in the uplands of the Jabal Akhdar. This, he intended, would ensure secure land communications between the main Italian held centres, removing a need to rely upon maritime links which were at the mercy of weather. Air communication was useful but could not transport sufficient numbers of troops, and certainly could not carry their heavy weaponry.

The resulting Italian operations were generally successful, though the majority of rebel troops usually escaped. In response Umar Mukhtar concentrated his own strength in the fertile Jabal Abid hills where these fighters remained a thorn in the side of Italian occupation forces. Mukhtar's followers also attacked isolated Italian positions in the area. Late in March Italian aircraft found a concentration of dissidents near Jirdis al-Abid. A military column was assembled under Major Angelo Bassi, consisting of almost 750 Libyan askaris and their officers. However, this force did not realise that it would face Umar Mukhtar's main army and in the valley of al-Rahaibah the Italians were driven back, losing almost half their strength in the process.

Umar Mukhtar followed up his success by challenging the Italian garrison at Marawa. The latter responded quickly and on 27 April Gen. Mezzetti marched out with a substantial force, largely consisting of Eritrean and Libyan troops supported by local pro-Italian irregulars. Around mid-day Italian S.V.A. aircraft located the main enemy force, so Gen. Mezzetti advanced, caught Umar Mukhtar's men by surprise and defeated them on 2 May. This, and other clashes on the same day, were followed by further Italian offensives through May and June, breaking up dissident forces and forcing them to flee to the most inaccessible parts of the Jabal Akhdar.

During such operations between April and June 1926, the Italian Air Force suffered only minor damage to six machines as a result of heavy landings, without injury to their crews. Further Italian actions followed in August and the first half of September. By 13 September the Jabal was largely in Italian hands. Meanwhile the Sanussi resistance lost heavily in men, material, not to mention the flocks of sheep and herds of camels upon which they depended. On the Italian side the casualties included four men from the Air Force: Sergenti Fernando Moltedo, Giovanni Belli and Guiseppe Viviani and Primo Aviere (First Airman) Antonio Jannace.

Meanwhile the Italian Council of Ministers and General Staff drew up new plans to link Italian controlled Tripolitania and Cyrenaica by establishing full control over the Sirtica region and the oases north of Latitude 29 degrees north. Nevertheless, this ambitious campaign deep into the desert was not attempted until 1928 (see above). First the Italians had to ensure their control over the Jabal Akhdar was complete. Hence that was where the Italian Army and Air Force, supported by the Italian Navy, focused their attention during 1927 and 1928. Italian military operations were not always successful, but Governor Teruzzi convinced some important tribes to change sides. Meanwhile several important Sanussi leaders lost hope and submitted in September 1927. Among them was Sayyid Muhammad al-Rida, brother and local representative of the exiled head of the Sanussi order, Muhammad al-Idrisi. The letter of submission which Sayyid Muhammad al-Rida unexpectedly sent to the Italian Governor in Benghazi had a profound impact upon the indigenous population. Even so, resistance did not end. Instead, Umar Mukhtar attacked one of the tribes which had submitted, killing 33 people and wounding 35.

Fighting continued through the rest of 1927 and early 1928, much of it involving substantial resistance forces operating south of Wadi Farij. Once again Maletti was in charge of Italian operations and his troops, including significant numbers of Eritreans supported by armoured cars and sometimes moving in motorised columns, achieved important successes. On 28 May a caravan of 100 camels carrying supplies to the dissidents was caught and captured as it crossed the Egyptian frontier. In most such clashes Italian forces suffered relatively light casualties, at least when compared to those they inflicted.

On 18 December 1928, Governor Attilio Teruzzi was replaced by Marshal Pietro Badoglio who now assumed the post of Governor of both Tripolitania and Cyrenaica. He would hold these posts until 31 December 1933. Badoglio found that the military situations in his two provinces differed widely. In Tripolitania Italian military forces were, in his opinion, well organised and led by experienced, highly trained officers. In Cyrenaica, in contrast, Badoglio considered Italian forces to be unnecessarily numerous, and to be dispersed between an excessive number of detachments with little cohesion between them. This, he reported, hampered offensive action because of inadequate logistical support, while a feeling of being constantly under siege by dissident forces undermined morale.

The Marshal was determined to shake things up by ordering a clearly defined defensive front to be established, within which all garrisons would be concentrated. The technical support services were reorganised while combat forces were reduced so that more of the available budget was spent on the construction of roads, without which Cyrenaica could never be secured. There were to be no further large-scale operations. Instead the Italian military focus would be on preventing enemy infiltration. Marshal Badoglio criticised previous large operations as being unduly expensive and usually achieving little positive result.

At the same time the new Italian governor sought a diplomatic solution, which the exiled Sayyid Idris al-Sanussi in Egypt was already looking for. An initial meeting between intermediaries in Alexandria on 23 March was followed by other meetings in April and May. Nevertheless, they came to nothing because the sides were too far apart. Badoglio wanted an end of hostilities while Sayyid Idris wanted a return to the situation as it had been at the end of the First World War, or at least something very similar to it. Meanwhile Umar Mukhtar actually met General Domenico Siciliani, the Vice Governor of Cyrenaica, near Barqaon 13 June 1929. This was followed less than a week later by a meeting between Marshal Badolgio and Umar Mukhtar, followed by a second meeting between the Libyan resistance leader and Siciliani. Once again the two sides proved too far apart to make real progress, especially when Sayyid Idris gave full authority to Umar Mukhtar, telling him to refuse any settlement with the Italians but also to refrain from further hostile actions.

The situation was a stalemate and a largely effective cease-fire was agreed until 24 October, in practice carrying on for a while longer. On 7 November 1929 one of two Ro.1s bringing recent intelligence information to an outpost at Birak, north of Sibha in the Fezzan, returned with a wounded Eritrean askari in the stretcher with which these machines had been fitted. The following day the truce was definitely ended when a small force Sanussi ambushed a group of Italian Libyan police who were repairing a telegraph line in Cyrenaica.

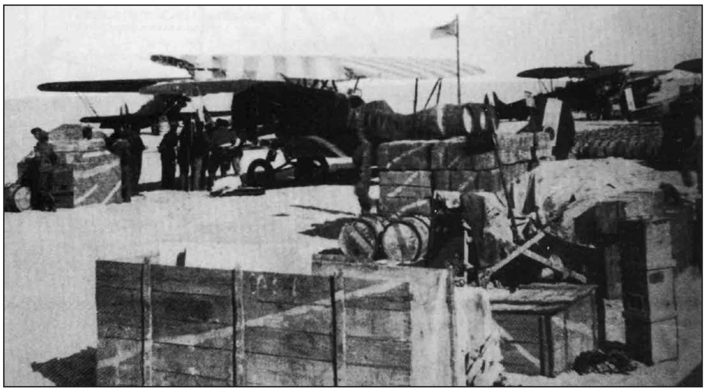
On the 11 November four Romeo Ro.1 machines and one Caproni assembled at Barqa aerodrome after which, led by Lieutenant Colonel Roberto Lordi the Italian air commander in Cyrenaica, they flew two sorties against two large dissident camps. But as two of the Romeos and the Caproni were attacking the enemy, a Ro.1 was hit by ground fire and had to make an emergency landing. The other aeroplanes paused their attacks in order to support their colleagues who had come down within sight of a Sanussi position. Unable to land safely in such rocky terrain, they circled and kept enemy horseman away with their guns. While doing so, the Caproni was also struck by fire from the ground, wounding its observer, Lt. Marni, puncturing the fuel tank and forcing the pilot to head for home. The remaining Romeo soon exhausted its ammunition and also had to return to Barqa, whereupon the downed aviators were captured. Lieutenant Giuseppe Beati was subsequently killed while trying to escape while the pilot, Maresciallo (Warrant Officer) Otto Huber died during the dissidents' retreat. Both were subsequently granted the Medaglia d'Oro.

Meanwhile Gen. Siciliani, who knew only that Beati and Huber had been captured, sent a message to the men under his command, stating that:

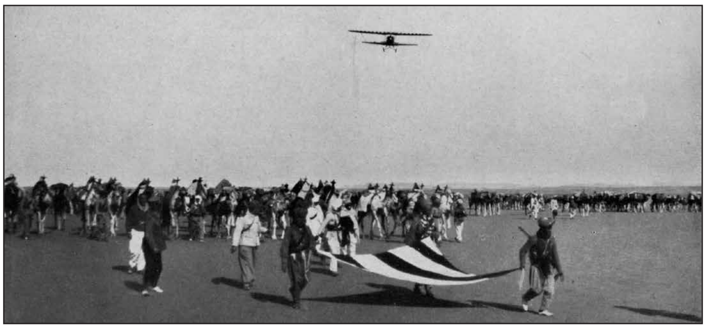
> The honour of the first clash went to aviation. The way it behaved gives us legitimate pride and we are correct to admire them. The aviators returned to the battlefield full of glory and even if a machine was hit and had to land, and its valiant crew was captured by armed enemies, this should not be seen as a loss for us, but rather as an example of heroism and glorious sacrifice by the winged Italians. My heart as your Vice-Governor, like those of all Italians and all soldiers in the colony, beats to the rhythm of their engines and is no less made of iron than are those of our courageous flying men.

After his success in Fezzan, Graziani had been made Lieutenant Governor of Cyrenaica on 17 March 1930: a post he held until the end of May 1934. Here the Italian authorities believed that they controlled substantial areas. This was true during daylight hours, but at night many of these same areas were actually controlled by the resistance. Gen. Graziani decided that ruthless repression was the only answer, so he declared that any gathering of more than three local men would be considered a threat and must be eliminated. The porous border with Egypt must also be closed.

The result was a wave of terror against the indigenous population of Cyrenaica during the years 1930 and 1931. Approximately 12,000 people were killed, many being executed, while the entire nomadic population of northern Cyrenaica were forced into huge concentration camps in the Sirt area where they suffered from overcrowding, malnutrition and lack of hygiene. Then, in June 1930, half the population of the Jabal al-Akhdar uplands was deported – 100,000 people – though a few managed to escape to Egypt. They were held in yet more concentration camps, this time around Benghazi, while their abandoned villages were offered to Italian settlers. Thirty or more Sanussi religious leaders were deported to Italy, property belonging to the Sanussi order was confiscated and Sanussi religious gatherings banned in the remaining mosques.



Romeo Ro.1s at Bir Zighan airfield, deep in the Libyan desert during operations against Sanussi held al-Kufra in 1931. High-visibility markings can be seen on the upper wings. (Archivio Ufficio Storico SME)



One of the Italian columns heading towards al-Kufra in 1931, with an identification banner to avoid being mistaken for the enemy by Italian aircraft. The high-visibility markings on the upper wings of the approaching Ro.1 can just be seen. (Archivio Ufficio Storico SME)

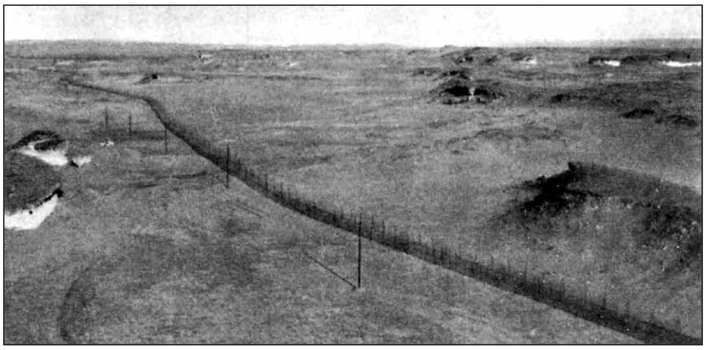
Next the Italians turned their attention towards the great oasis or collection of oases at al-Kufrah in south-eastern Libya, the Sanussi movement's last real stronghold within the country. The first stage of this remarkable, but extremely brutal conquest was to get a striking force from Ajdabiya on the coast to the oasis of Jalu. Before this, however, the Italians won a significant victory over dissident forces in the wooded Wadi Marajjiya area on 28 January. It was the biggest Italian military success for a long time, but again Umar Mukhtar escaped capture. Victory at Wadi Marajjiya was followed by other successes between February and April, though some were very hard fought and the resistance attempted several counterattacks.

By late July, Graziani had achieved his first objective by disarming and controlling the indigenous population within Italian-controlled areas. He had also concentrated the bulk of this population, eventually including most of the nomadic groups, within carefully supervised areas. With a complete lack of regard for the truth, on 9 June 1931 Gen. Graziani told Italian and foreign journalist that:

> No radical change in way of life was imposed on the population, no force has caused them to move to the flat lands south of Benghazi. The way they used to live, in tents and with their herds, is how they are still living in the new camps, and in this regard I want to point out that there was no question of real concentration camps.

The General then emphasised the provision of schools, houses, medical dispensaries, wells and toilets for these people, which had been impossible in their previous nomadic way of life. Apart from being brutal, such a policy was also very expensive for a still relatively poor country like Italy. Graziani's justification would

The exceptionally rugged Tibesti mountains where southern Libya met what was then French Equatorial Africa (now Chad), photographed from an Italian Romeo Ro.1 in the early 1930s. (Archivio Ufficio Storico SME)



An early version of the barbed wire barrier, which the Italians constructed along the northern part of the Libyan frontier with Egypt, probably photographed in 1931. (Archivio Ufficio Storico SME)

nevertheless be copied and repeated across much of the Middle East by governments seeking to impose state control upon the traditionally free Bedouin.

Umar Mukhtar now reportedly moved his still peripatetic headquarters across the open frontier to Egypt, into what is sometimes called the Libyan Plateau. Here the local Egyptian authorities largely turned a blind eye. Meanwhile it was impossible for the Italians to monitor both the land frontier between Jaghbub and the coast as well as the Mediterranean coast, especially west of Bardiah where small fishing boats could land supplies for the "rebels" at night. Gen. Graziani had barbed wire fences built around the camps where the Cyrenaican population had been concentrated.

Even so, Sanussi dissidents continued to launch attacks; one in particular targeting a caravan train near Ajdabiya. In response Lt. Col. Lordi was ordered to attack Tazirbu, an oasis about 350 kms northwest of the main oasis of Kufra, as it was from here that the Sanussi raiders supposedly came. Tazirbu was therefore bombed on 4 July 1930 by four Ro.1 aeroplanes of No. 16 Sq., sent to Jalu for this purpose. Lordi himself led the sortie during which the Romeos dropped twelve 12kg high explosive bombs, three-hundred and twenty 2kg anti-personnel bombs, and twenty-four 21kg mustard gas bombs. They attacked in line-astern with 700 metres between each aeroplane. On their return journey, however, they flew in close pairs with orders that, if one machine had to make an emergency landing in the desert, the second would try to land as close as possible while another pair of aeroplanes circled the area, watching for the enemy until help arrived. According to intelligence reports this air attack, so deep into the desert, caused panic and two of the rebel leaders, Salah al-Atiyush and Abd al-Jabil Saif al-Nasir, fell back to Kufra. Tazirbu was bombed again on 31 July and 25 August.

Meanwhile a reconnaissance in force was undertaken by the Italian Army towards Wadi Zighan, which lay east of Tazirbu and northwest of Kufra. This column was commanded by Major Lorenzini and consisted of 32 vehicles, including armoured cars, and 120 men, all Italian volunteers and Fascist Black Shirt militiamen. Having started from Benghazi towards Jalu on 16 August, it set off from Jalu oasis on the 23rd. One of Lorenzini's main tasks was to locate reliable sources of water, which he did before reaching the outskirts of Zighan. Afterwards he returned to Jalu, arriving safely late on the 28 August. It was a remarkable feat, over difficult Saharan desert in the heat of high summer.

Meanwhile three Ro.1s attacked the Kufra oases on 26 August, two bombing al-Taj while two bombed al-Jawf, dropping more than a ton and a half of explosives. To carry out such a long-range raid the aeroplanes had to fly part of the way the preceding day, landing at Jalu to be refuelled overnight. Two of these machines had also been fitted with an additional fuel tank. At around 0500 hours the following morning they took off on a three-hour flight to Kufra. Initially it looked as if the oasis of al-Jawf was deserted, but as soon as bombs started to fall, groups of terrified people scattered in search of refuge. The Italian aircrew reported that the village was soon shrouded in black smoke, pierced by the flashing of exploding bombs. A large white building with elegant arches in the centre of the village partially collapsed when struck by a bomb. The two groups of aeroplanes dropped about 7,000kg of high explosive but, unlike the raid on Tazirbu, neither machine guns nor gas bombs were used.

These various Italian actions convinced many of the Sanussi in Kufra to leave for Egypt, while the Italians themselves made careful preparations for their thrust against this cluster of oases. The main column heading for Zighan would set off from Jalu, about 400kms away, while the secondary column heading for Tazirbu would have a longer journey, setting off from Zillah some 680kms to the north-west. The main column was also to be supported by a squadron of 15 Ro.1s, while the second would be supported by six Ro.1s.

After occupying the wells at Tazirbu and Zighan, the columns were expected to press onward to take control of Kufra itself, where they would establish a garrison. Meanwhile the arrival of Salah al-Atiyush and Abd al-Jalil Saif al-Nasir in Kufra increased local determination to resist the Italian assault. There were reportedly about 600 Sanussi soldiers here, the largest and best armed unit being led by Abd al-Hamid Abu Matari. There was also confidence that the sand dunes which surrounded Kufra, would prove impassable for motorised Italian forces. The Sanussi leadership was now based on the other side of the frontier in Egypt, from where it gave full authority to Salah and Abd al-Jalil, enabling decisions to be made quickly. Everyone also realised that it was essential for the Sanussi resistance to hold Kufra, as its loss could destroy Sanussi prestige not only in Libya, but across the entire Muslim world.

Fighting continued intermittently through the autumn until December, when the force targeting Zighan was almost ready to move. At this point news arrived that a large number of fighters from Kufra had fled to Egypt with their families. On 18 December Gen. Graziani reviewed the expeditionary force assembled at Ajdabiya. Two days later this set off for Jalu in three columns under the overall command of Gen. Ronchetti. The columns were commanded by Colonel Maletti, Major Lorenzini and Major Rolle. Bir Zighan was reached with the loss of about 100 of the originally 3,500 baggage camels, which was considered a success under such circumstances.

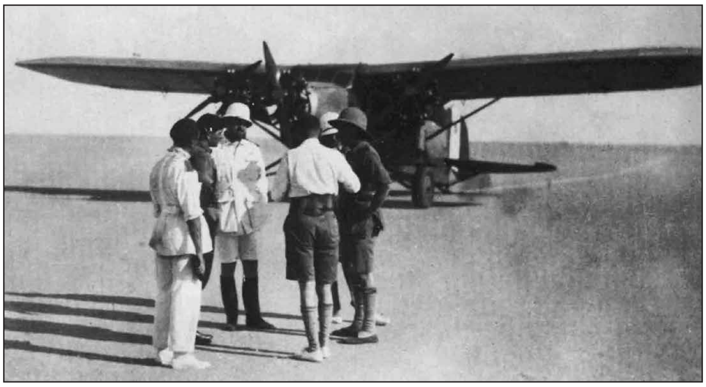
On 12 January seven Ro.1s flew to Bir Zighan, one of them carrying Gen. Graziani who wanted to personally direct final arrangements for the assault on Kufra. Two days later Col. Maletti's column set off, hoping to take the defenders of the oases by surprise. On the morning of 18 January, Italian aeroplanes made the first ever long-distance aerial reconnaissance of Kufra and reported a large nomad camp near al-Jawf. Italian armoured cars had reached Tazirbu and Buzaymah, which lay between Tazirbu and Kufra. Still it seemed that Kufra was unaware of the Italian approach. At dawn on the 19th, Prince Amadeo of Savoy flew one of four Romeos carrying out reconnaissance, one of the others being flown by Lt. Col. Roberto Lordi. Prince Amadeo had, in fact, earned his wings as a military pilot in 1926 and would subsequently be awarded the Silver Medal for his flights during the war against Umar Mukhtar's forces.

These aeroplanes reported that the tracks of a substantial number of people could be seen crossing the sand dunes between al-Jawf and al-Hawari while there were large herds of cattle assembled on the southern edges of the oasis, close to caravan routes leading southward. Clearly much of the population of these oases was preparing to flee across the frontier into Egypt. A subsequent reconnaissance sortie at around 1000 hours reported that several armed groups, numbering about 400 men, were heading towards one of the Italian columns. Col. Maletti now redirected his column to take this enemy between two fires, forcing them to retreat to the small oasis of al-Hawari, then to al-Taj and al-Jawf.

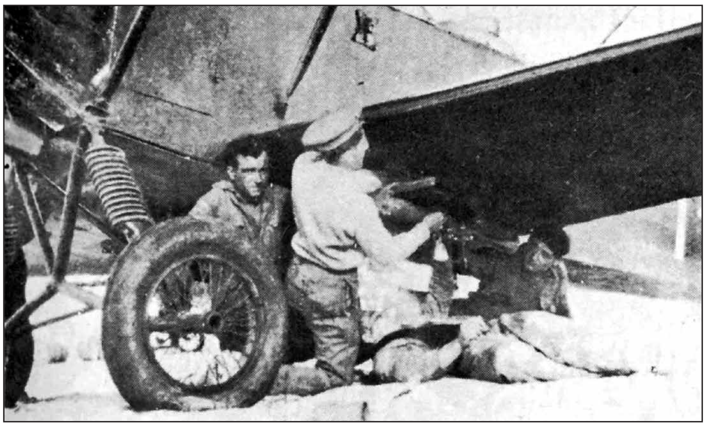
Elsewhere determined resistance against an increasingly superior enemy was maintained by dissident forces under Abd al-Jalil al-Nasir and others, although they eventually had to retreat after suffering serious losses. Early in the morning of 20 January, Col. Maletti's column occupied the Sanussi stronghold at al-Taj while smaller Italian mobile units pursued fugitives. The latter appeared to be scattering in all directions while harried by Italian Romeo Ro.1s. One group of enemy headed for the Egyptian frontier, another south-eastward towards the oasis of al-Uwaynat while a third headed southwest towards the Tibesti mountains in nominally French territory. During this prolonged and extremely ruthless aerial hunt the Italian aircraft used up most of the ten tonnes of bombs and 9,000 machine gun bullets which had been intended for the assault on Kufra. Only the Caproni Ca.97 based in Tripoli did not take part in these strafes. Instead it carried a full "cargo" of wounded men from Bir Zighan to Benghazi but, on the return flight, was seriously damaged when a tyre burst on landing at Ajdabiya to refuel.

Meanwhile the Italian 3rd Saharan Group, a specialist desert warfare formation from Tripoli, prepared to "clean up" the oasis of al-Jawf. Preceded by Italian aircraft, they located and captured large numbers of stragglers, mostly women and children, while the aircraft went on to bomb and strafe more distant and numerous enemy columns as they fled. The largest such force seemed to be heading for the Tibesti, so the 1st Saharan Group was sent after them. This pursuit continued as far as the wells of Ma'tan Bishrah, after which the Saharan Group returned to Kufra. The enemy had fled so fast that even the specialist troops of the 1st Saharan Group had been unable to catch up, but the Italians had seen the tragic remnants of the retreat. The area around the watering places at Ma'tan Bishrah was littered with corpses while dead people and animals were similarly scattered along other routes from Kufra, most having been mown down by the Ro.1s.

Other fugitives died through a lack of food and water; having fled so precipitously that they failed to take enough with them. In fact many of those who survived, including at least 200 women and children, did so because they were caught by Italian meharisti camel-mounted pursuers who brought them back to the oases, along with their animals and possessions. One group of around 200 people, led by Salah al-Atiyush got lost in the desert, about 170 perishing before the survivors were found by a desert patrol in the Anglo-Egyptian Sudan. The band led by Abd al-Jalil Sayf al-Nasir was luckier, as it received help from both Anglo-Egyptian and Italian patrols while crossing the international frontier.



Italo Balbo's Caproni Ca.101 landed in the deep Sahara during his flight to the Tibesti Mountains in the far south of Libya. This was before Balbo (in a white solar topee) became governor of Libya on 1 January 1934. (Pedralia archive)



Attaching bombs to the racks of an Italian Ro.1 in Libya during the early 1930s. (Archivio Ufficio Storico SME)

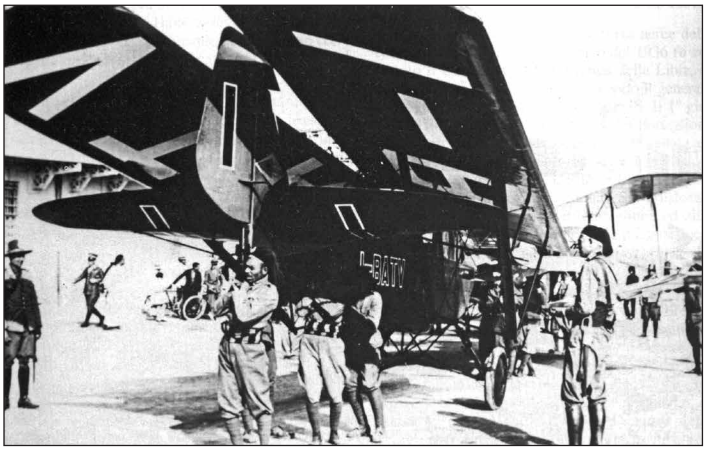
By late February, mopping up operations were complete and most of the Italian units withdrew northwards, leaving a relatively small garrison in Kufra. Many local people returned and the traditional caravan traffic across the Sahara Desert resumed. One caravan arrived at the end of May, carrying what were described as cordial letters from the French garrison commander at Fort Lamy (now N'Djamena, the capital of Chad).

The fall of Kufra may have deprived Umar Mukhtar's followers of their last major refuge inside Libya, but it did not end resistance in Cyrenaica. To deal with it Gen. Graziani again reorganised his forces, making his Eritrean battalions and those units guarding the frontier with Egypt more mobile. His artillery was similarly made more mobile and able to react more quickly. Nevertheless, later in February a dissident group seized numerous cattle from a tribe which had submitted to the Italians. Most were recovered but other clashes followed in March. Following a lull during April, the Italians – including armoured cars – attacked a rebel group in May. These were, however, minor operations and nothing on a larger scale took place until September 1931.

Instead Graziani focussed on the construction of a huge, cross-linked barbed wire fence or entanglement, several lines deep and several metres high. This eventually stretched 270 kms from Bardia on the coast to the oasis of Jaghbub, taking from April to September to complete. Although the British tried to make this barbed wire obstacle look pathetic by driving tanks straight through it in front of news cameras during the Second World War, the fence had not been designed to withstand armoured vehicles. Against men and animals – namely the forces of the Libyan resistance under Umar Mukhtar – Graziani's fence was brutally effective. It took 200 Italian soldiers, 100 Italian construction workers, 2,500 local labourers and 300 transport lorries to construct the barrier, which was also strengthened with three forts and six smaller redoubts. This colossal work nevertheless cost less than had been feared, and it brought Cyrenaican resistance to an end.

Behind the lines of wire were three forward aerodromes at Umm Sa'ad, Bir al-Shaqqa and Jaghbub, as well as a dedicated telephone line with five exchanges and telephone positions. These formed part of the Italian air strength in Cyrenaica, under the overall command of Lt. Col. Lordi who was headquartered at Benghazi. Also at Benghazi was No. 16 Sq. equipped with Ro.1s and led by Lt. Mario Galli. Ajdabiya was home to a Section of No. 26 Sq. with three S.V.A.s, while Tobruk was home to the S.V.A.s of No. 37 Sq. under Capt. Arrigo Tessari.

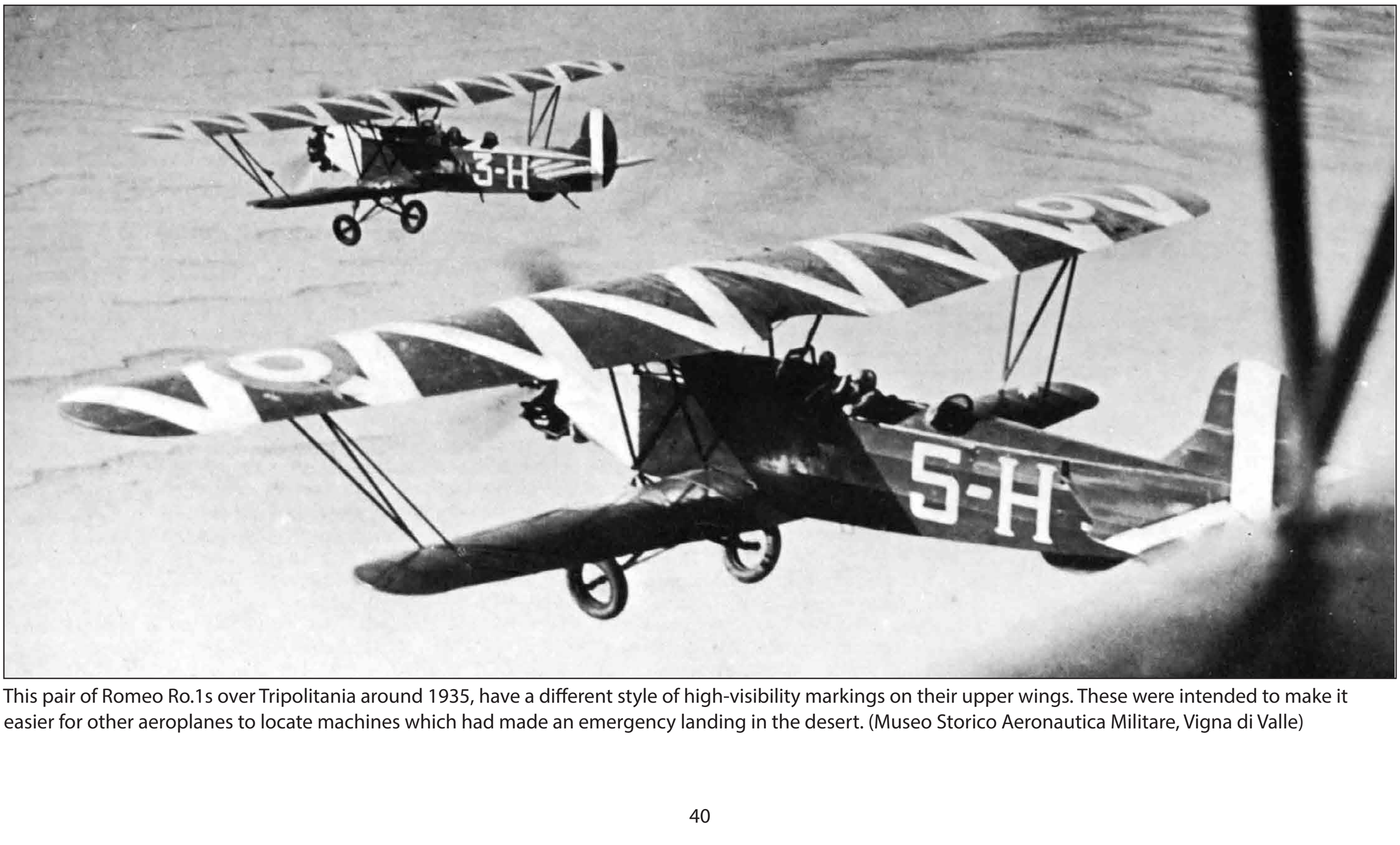
On the morning of 10 September 1931, the commander of Italian troops in the Jabal Akhdar was informed that Umar Mukhtar had been located northeast of Ain Lafu, in the Wadi Abu Taja valley. An operation to encircle this area was quickly organised but warned of this, Umar Mukhtar's fighting group tried to escape to the Wadi al-Kuf. His move was seen by Italian aircraft and the route was promptly blocked by a unit of *savari*, regular Libyan cavalry in the Italian Army. One of the savari recognised Umar Mukhtar, having known him previously, and the old "Lion of the Desert" was at last captured. He was taken to Appolonia (now Marsa Susa) on the coast. The following day Umar Mukhtar was put aboard the Italian Navy destroyer *Orsini* which took him to Benghazi where he was imprisoned.


A civilian Breda 15 (registration I-BATV) being manoeuvred by Libyan askaris in the early 1930s. At this time the Breda may have been owned by the Federazione Provinciale Fascita (Provincial Fascist League) in Milan. (Pedralia archive)

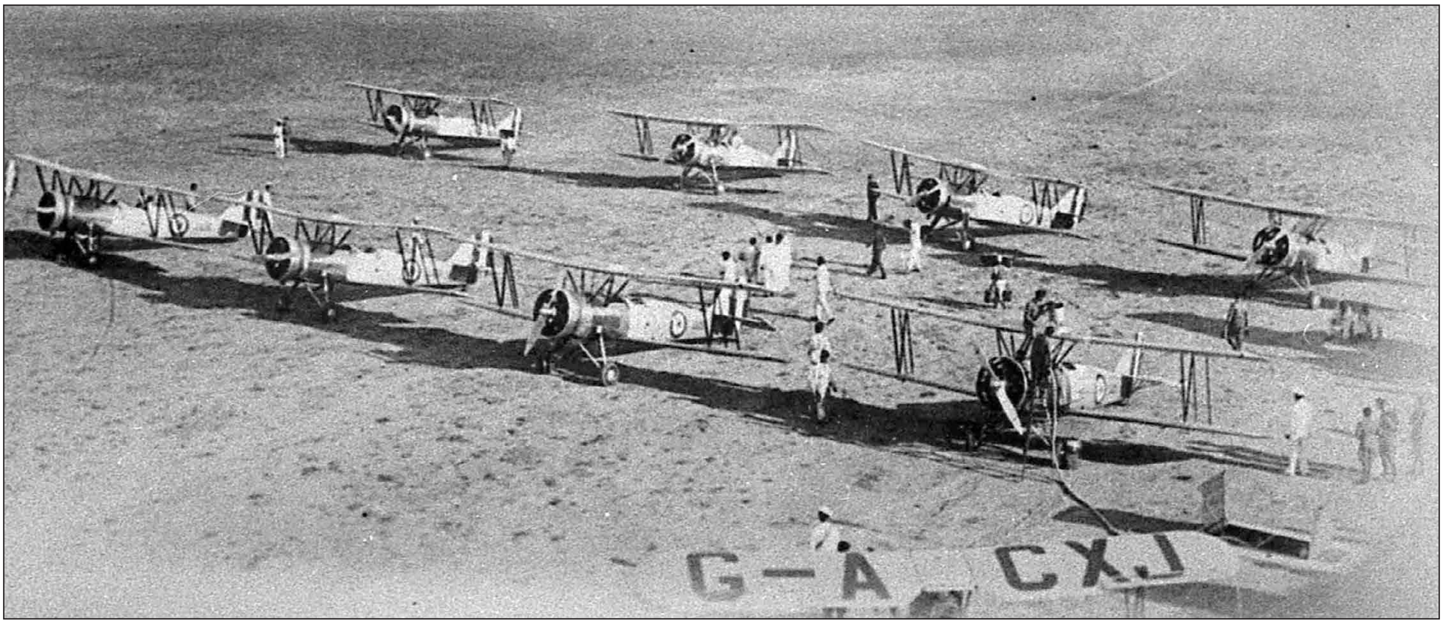
During tension between Italy and the United Kingdom in 1935, the Fiat CR.30 fighters of the Regia Aeronautica's 2 Stormo Caccia were sent to Libya to defend Tobruk. On the other side of the frontier the British at Marsa Matruh were similarly reinforced by a Flight of Egyptian Avro 626s. (Museo Storico Aeronautica Militare, Vigna di Valle)

Gen. Graziani was currently in Rome, preparing to take a train to Paris to attend the International Colonial Exhibition which had opened there on 6 May 1931. Instead Graziani hurried flew from Ostia to Tripoli on 13 September, reaching Benghazi the following day. On the 15th a Special Court was convened and on the same day General Graziani had an opportunity to speak with his renowned adversary through a Libyan interpreter, Captain Khalifa Khalid. The subsequent trial was brief and the outcome a foregone conclusion as Umar Mukhtar admitted all charges except that of torturing prisoners. He was executed by hanging in the main square of Suluq at 9 in the morning of 16 September 1931, in front of witnesses and an estimated crowd of 20,000 people.

None of Umar Mukhtar's subordinates were able to continue the resistance. Some fled Egypt, though Yusuf Abu Rahil, the commander of Umar Mukhtar's cavalry, was killed with three companions while trying to cross the frontier. Others surrendered



This pair of Romeo Ro.1s over Tripolitania around 1935, have a different style of high-visibility markings on their upper wings. These were intended to make it easier for other aeroplanes to locate machines which had made an emergency landing in the desert. (Museo Storico Aeronautica Militare, Vigna di Valle)



In September 1934 the EAAF's second delivery of Avro 626s flew from England to Egypt. Here they are being refuelled at Millaha aerodrome outside Tripoli. In the foreground is the Avro 643 Cadet of *Qa'im-Maqam* Tait (G-ACXJ), the Canadian CO of the EAAF, which was registered to him on 3 August 1934 as his personal aeroplane. (Tait archive)

The first delivery flight of Egyptian Army Air Force (EAAF) De Havilland DH.60 Moths being refuelled outside Tripoli at the end of June 1932 and attracting the curiosity of Regia Aeronatica officers. (V.H. Tait archive)

to the Italians or were captured. There were some clashes on 11 and 17 October 1931, but the last recorded engagement was on 10 November when a battalion from the 22nd Eritrean regiment fired on a group of Arabs as they fled.

On 21 December 1931, Graziani announced that the Cyrenaica "rebellion" was ended; this being confirmed on 24 January 1932 when Marshal Badoglio solemnly proclaimed the complete and definitive pacification of Libya. Estimates of the number of people killed in Cyrenaica and Fezzan between 1928 and 1932 (that is excluding earlier casualties in Tripolitania), suggest that half the entire Bedouin population were killed directly or died as a result of disease or starvation in Italian concentration camps – a total of around 50,000 victims of the repression. Indeed Graziani's crushing of resistance was so complete that it probably accounted for Winston Churchill's rather petulant complaint that the Allies received virtually no support from the Arab and Berber populations of Libya during the North African campaigns of the Second World War. Meanwhile around 150,000 Italians eventually settled in Libya, forming approximately one fifth of the entire population. The overwhelming majority would be expelled after the war.

The end of hostilities in Libya meant that Italy could look towards expanding its influence and perhaps repair its damaged reputation elsewhere in the Arab world. In 1929 relations between the Kingdom of Italy and the Vatican City had been settled after decades of wrangling, with the Lateran Treaty of 11 February 1929. Now Benito Mussolini could offer the Papal See the services of an Italian aeroplane to carry a Papal message to the Latin (Roman Catholic) Patriarch of Jerusalem, an exercise which might benefit all. The aeroplane would a Savoia-Marchetti S.71 of the Societa Aerea Mediterranea with support from the Italian Air Force, while the pilot would be Leonida Schiona, who already had considerable experience not only as a pioneer of long-distance flying but also of flying in the Arab world (see Volume Four).

Gr. Uff. Ferrata of the Cavalieri del Santo Sepolcro, or "Chivalric Order of the Holy Sepulchre", carried the message from Pope Pius XI, his Order having been restructured when the Latin Patriarchate of Jerusalem was itself restored in 1847. Also in the party was Marquis Gavotti of the Societa Aerea Mediterranea and, though proclaimed as a Peace Mission, the entire episode was highly political. Nor was it particularly welcome to the British who were ruling Palestine at the time.

The Savoia-Marchetti S.71 took off at 0410 hrs on 1 April from Littorio airport outside Rome and reached the Albanian capital of Tirana at 0730. An hour and 20 minutes later, after refuelling, Schiona took off and flew over the Greek Island of Corfu, southern Greece and Crete before landing at Tobruk in eastern Libya at 1450. Here there was an overnight refuelling stop before Schiona took off at 0615, on 2 April, on the third leg of his journey. He flew over Gaza before landing at Ramlah in Palestine at 1540. This was followed by a 40km drive up into the hills towards Jerusalem where the Italian party was greeted by Patriarch Luigi Barlassina, the only Latin or Catholic Patriarch in the Middle East as well as being the "administrator" of the chivalric Order of the Holy Sepulchre.

The small but influential Palestinian Arab Catholic community was delighted with this visit by a representative of the Pope, as was their Patriach Barlassina. After presenting his visitors with palm and olive branches from Mount Gethsemane, Luigi Barlassina accompanied them back to Ramlah, where the Savoia-Machetti, with Leonida Schiona at the controls, took off on the first of three stages back to Rome. Barlassina would remain Latin Patriarch of Jerusalem until his death on 27 September 1947 and was, perhaps, fortunate it not living to witness the catastrophe which overwhelmed his congregation the following year.

Just over three months after the flight to Palestine and back, Leonida Schiona had a narrow escape when piloting another S.71 of the Societa Aerea Mediterranea from Rome to Thessaloniki. A fuel pipe broke, but fortunately there was no fire. Instead Schiona landed the large three-engined aeroplane close to the Via Nomentana, an ancient Roman road close to Torraccio without injury to the crew of two and his six passengers.

On 1 January 1934, Marshal Badoglio was replaced as governor of Tripolitania and Cyrenaica by Air Marshal Italo Balbo. To some extent this reflected the significance of air power in the conquest and pacification of Libya, and its expected importance in maintaining Italian control in the future. In 1934, Italy also reunited the three provinces of its North African empire, under the name Libya. Records show that, on 1 January 1934, Italian air strength in Libya was as shown in Tables 8 and 9:

TABLE 8: ITALIAN AIR STRENGTH IN TRIPOLITANIA, 1 JANUARY 1934		
TRIPOLITANIA		
HEADQUARTERS: TRIPOLI (MILLAHA) UNDER LT. COL. SACCHI PARIDE		
Tripoli (Millaha)	HQ Mixed Group	Ro.1 and Ba. 39
	No. 89 Bomber Sq	Ca. 101
	Training Sq	To be equipped with Ba. 39s, not yet arrived
	General Staff Sq	Ro.1 and Ba. 39
	No. 12 Recce. Sq	Ro.1
Sirt	No. 104 Recce. Sq	Ro.1

The number of personnel in the Italian Air Force units in Tripolitania at the start of 1934 is not recorded, but on 1 January 1935 they consisted of the following:

Officers: 19 pilots
Non-commissioned officers: 9 pilots, 13 drivers, 9 fitters, 4 photographers, 5 armourers, 4 wireless electricians, 2 wireless operators
Soldiers: 44 specialists
Italian Army (on attachment to the Regia Aeronautica):
  Observer officers: 3
  Colonial Troops: 24 NCOs and 115 soldiers
Civilian staff:
  Italians: 26
  Libyans: 206

TABLE 9: ITALIAN AIR STRENGTH IN CYRENAICA, 1 JANUARY 1934		
CYRENAICA		
HEADQUARTERS: BENGHAZI UNDER LT. COL. GINO SOZZANI		
Benghazi	No. 16 Sq	Nine Ro.1s and three Fiat A.S.1s under Capt. Ferdinando Kellerman
	No. 26 Sq	Three Ca. 101s and one Ca.100 under Capt. Emilio Vittani
Apollonia (Marsa Susa):	No. 23 Sq	Eight Ro.1s under Capt. Vespasiano Paoletti
Tobruk:	No. 37 Sq	Eight Ro.1s under Capt. Francesco De Grandi

The number of personnel in the Italian Air Force units in Cyrenaica at the start of 1934 is not recorded, but on 1 January 1933 they had consisted of the following:

Officers: 19 pilots, 3 observers, 1 engineer and 4 administrative officers
Non-commissioned officers: 10 pilots, 14 drivers, 12 fitters, 3 armourers, 1 photographer, 1 radio operator and 1 staff NCO
Soldiers: 21 drivers, 21 fitters, 3 armourers, 3 photographers, 4 wireless electricians, 2 wireless operators, 1 administrator
Italian Army and Navy (on attachment):
  Officers: 12 observers and 6 staff
  Colonial Troops: 112 Libyan askaris
Civilian staff:
  Italians: 33
  Libyans: 23

The year 1934 saw Britain and France tacitly recognise Italy's increased importance amongst the imperial powers by ceding yet more territory to Italian-ruled Libya following an agreement signed on 20 July 1934. The extensive but sparsely populated areas in question were the Sarra Triangle in the north-western corner of the Anglo-Egyptian Sudan (see Volume Four) and the Azu (or Azou) Strip. The latter lay along the frontier of the French territory once called the Territoire Militaire des Pays et Protectorats du Tchad, more recently incorporated into French Equatorial Africa and today forming the independent nation of Chad.

These acts of appeasement did not, of course, stop Fascist aggression, being promptly followed by Mussolini's invasion of Abyssinia from the existing Italian colonies of Somalia and Eritrea on 3 October 1935. Furthermore, the agreement between Italy and France was never ratified and after Mussolini formed an alliance with Hitler, the so-called "Pact of Steel", in May 1939 it lapsed. Despite remaining under French control, the southern edge of the Azu Strip was nevertheless still assumed to be the actual Libyan frontier until an agreement between France and the now independent Kingdom of Libya in 1955. Thereafter, this strip of frontier territory would remain a bone of contention between Libya and Chad, resulting in armed clashes from 29 January 1978 until 11 September 1987.

PART TWO

AIR POLICING IN THE MIDDLE EAST

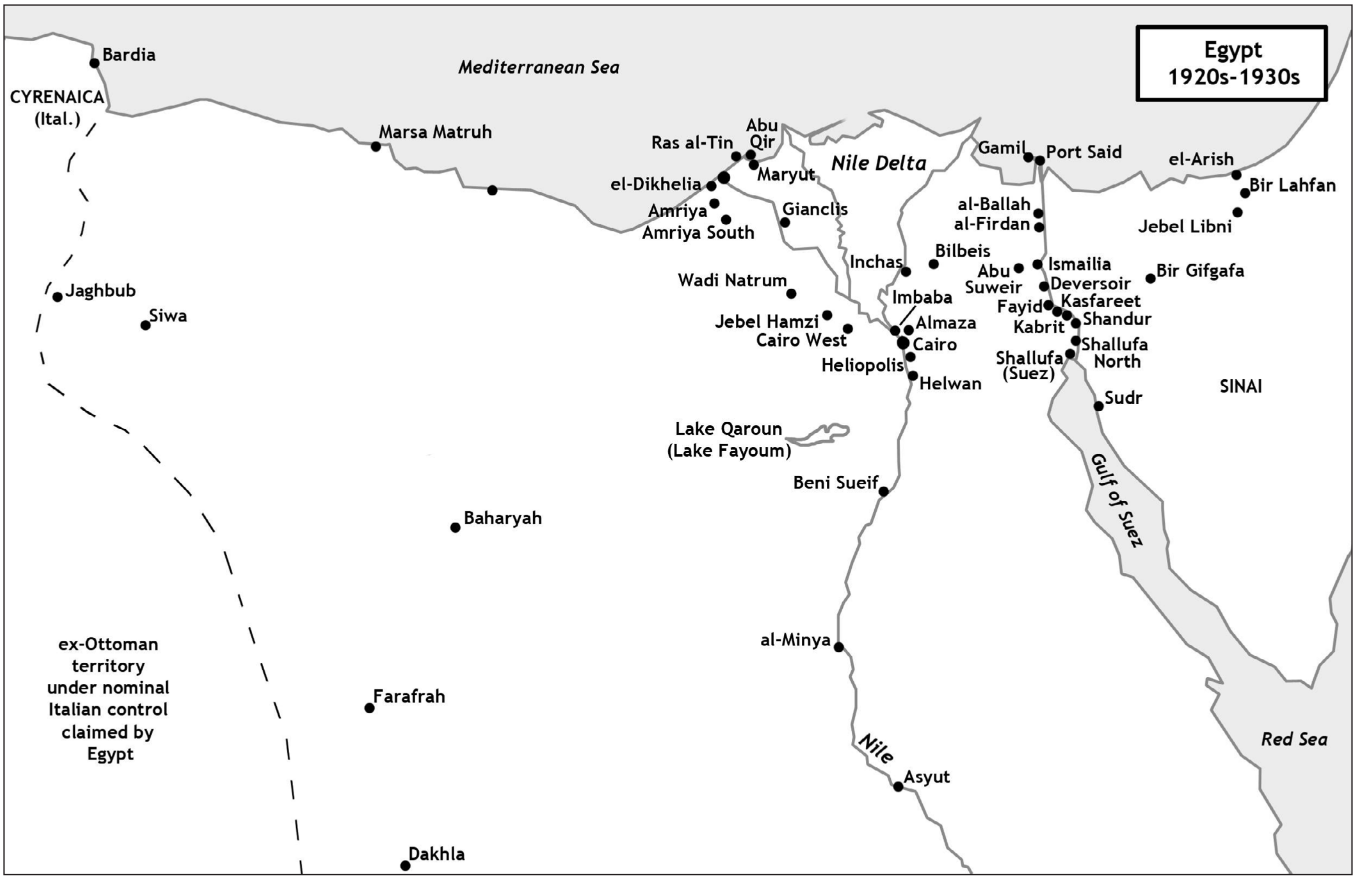
5

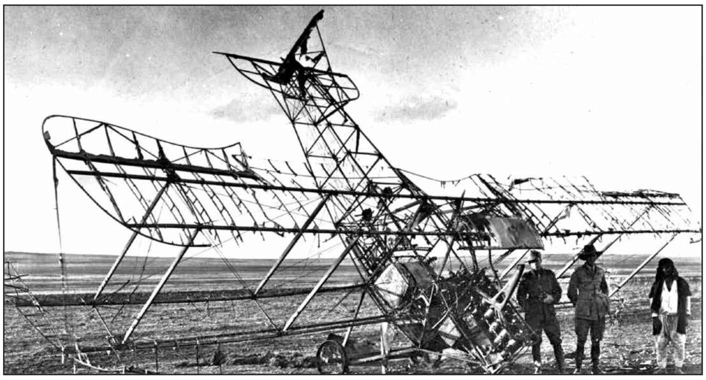
THE ARAB MIDDLE EAST UNDER BRITAIN AND FRANCE

After the Armistice of 1918, and during the protracted Versailles Peace Conference which followed from January 1919 to July 1923, the government and people of Egypt naively expected to be treated as an ally whose aspirations would be given due consideration, if not as one of the victorious powers. Put simply, the Egyptians expected a reward for their contribution towards Allied, and more specifically British, victory in the Great War, especially in the light of President Woodrow Wilson of the USA's proclaimed Fourteen Points. The fifth of these Points was based upon a strict observance of the principle that, in determining all questions of sovereignty, the interests of the populations concerned must have equal weight with those of the government whose title to a territory was to be determined. Many subject colonial peoples, including the Egyptians and other Arabs, interpreted this as supporting their own independence. They would be rapidly disabused.

The most senior British official in Cairo, Sir Reginald Wingate, refused to allow an Egyptian delegation to attend the Versailles Peace Conference in France. The Egyptian government had requested such permission on 13 November 1918, just two days after the Armistice between the Allied Powers and Germany came into effect. Wingate had the power to make such a decision because Britain had unilaterally declared Egypt to be a separate Sultanate – as distinct from its previous position as a nominal province of the Ottoman Empire – on 19 December 1914. Furthermore, the new Sultanate of Egypt had been a British protectorate since that date. In practice, of course, the United Kingdom remained an occupying power, as it had been since 1882. To rub salt into a wound to Egyptian sensibilities, delegations from the previous Ottoman territories of Syria, Arabia and Cyprus were allowed to go to Paris. Worse was to follow when the formal independence of the Hashemite Kingdom in Arabia was recognised by the great powers and other countries, whereas Egyptian independence was not.

In 1919 political and emotional tensions in Egypt erupted into a major crisis which persisted until 1922. Britain was caught by surprise, not least because the Egyptian nation, which rose against foreign domination in 1919, was very different from that which had tried to reject foreign interference back in 1882. During the intervening years under British occupation, Egypt had changed from a backward, feudal and in some respects rather primitive state to one which enjoyed a remarkable degree of prosperity and order. Yet its government, internal administration and military forces were still dominated by the British and led by British officers. The Egyptian Sultan's government was still very authoritarian, while at the same time there had been a steadily increasing sense of nationalism. This was accompanied by growing frustration at British domination, especially amongst the country's educated classes, both civilian and military. Unfortunately, these educated *effendis* were largely dismissed as representatives of an effete "pasha class" by the British and by those from "white" British colonial territories.


Egypt
1920s-1930s
Mediterranean Sea
Bardia
CYRENAICA (Ital.)
Marsa Matruh
Ras al-Tin
Abu Qir
Maryut
el-Dikhelia
Amriya
Amriya South
Gianclis
Nile Delta
Gamil
Port Said
el-Arish
Bir Lahfan
Jebel Libni
al-Ballah
al-Firdan
Bilbeis
Inchas
Abu Suweir
Ismailia
Deversoir
Bir Gifgafa
Wadi Natrum
Imbaba
Fayid
Kasfareet
Kabrit
Shandur
Jebel Hamzi
Almaza
Cairo West
Cairo
Heliopolis
Shallufa (Suez)
Shallufa North
Helwan
Sudr
SINAI
Jaghbub
Siwa
Lake Qaroun (Lake Fayoum)
Beni Sueif
Gulf of Suez
Baharyah
al-Minya
ex-Ottoman territory under nominal Italian control claimed by Egypt
Farafrah
Nile
Asyut
Red Sea
Dakhla



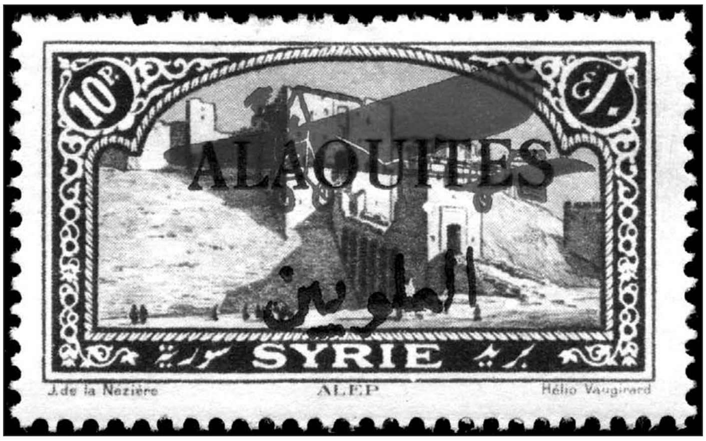
A local man with two Australian soldiers and the remains of one of 25 aeroplanes destroyed by the Germans on their retreat from Rayaq in Lebanon in October 1918. It appears to be an AEG C.IV. (Australian War Memorial)

While British insistence on retaining a military presence in Egypt to protect imperial communications with India was resented by almost all Egyptians, certain groups within Egyptian society had more specific reasons to complain. For example, the large Egyptian Camel Transport Corps (ECTC), which had been conscripted from the Egyptian *fallahin* or peasantry during the First World War, was not demobilised at the end of that conflict because the British still needed the ECTC for communications and transport across Sinai to British occupation forces in Palestine and Syria. The latter would remain in place until the future of these regions was decided at Versailles and other peace conferences. It might be true to say that, by 1919, many fallahin now hated the British authorities, which would contribute to the violence of the Egyptian Revolt that year.

Meanwhile, educated Egyptians were divided on the question of where the future course of their country should lie. Should Egypt strive for a secular or an Islamist future, and should its government be democratic or authoritarian? The British used such divisions to bolster their own position but, by refusing to allow an Egyptian delegation to attend the main peace conference, they managed to unite the greater part of the country against them. This event was, in fact, promptly followed by the official creation of the Wafd Party (*Wafd al-Misri* or "Egyptian Delegation") which had existed unofficially since November 1918. Under its leader, Sa'ad Zaghlul, the Wafd's avowed aim was genuine independence for Egypt. The Wafd's leadership was also educated, being drawn from the middle class and minor aristocracy, and was fundamentally opposed to the use of violence against an overwhelmingly stronger occupying power. Elsewhere in the country, however, ordinary people, both urban and rural, took part in strikes, demonstrations and even a few acts of sabotage against the British.

Amongst those whom the British blamed for these events was the Wafd Party, four of whose leaders including Sa'ad Zaghlul were deported to Malta on 8 March 1919. There Zaghlul would be joined by the Egyptian-born Sa'id Halim Pasha who had served as the Ottoman Empire's Grand Vizier from 1913 to 1917 and had then been accused of treason by the rump Ottoman government in the immediate aftermath of the Great War. With him went Prince Muhammad Abbas Halim, and both men had all their Egyptian assets confiscated.

Sa'id Halim Pasha would be murdered by an Armenian assassin in Rome in 1921. However, the exiling of Zaghlul to Malta, from where he was subsequently moved to the Seychelle Islands, merely exacerbated the situation back in Egypt and led to huge frustration amongst the Egyptian public, accompanied by attacks on British institutions and individuals, as well as considerable damage to the country's own infrastructure. Over 800 people were killed, almost all Egyptians. Yet it is interesting to note that Egyptian military units, including the large, deeply unhappy and still not demobilised Egyptian Labour Corps (ELC), took virtually no part in these disturbances.



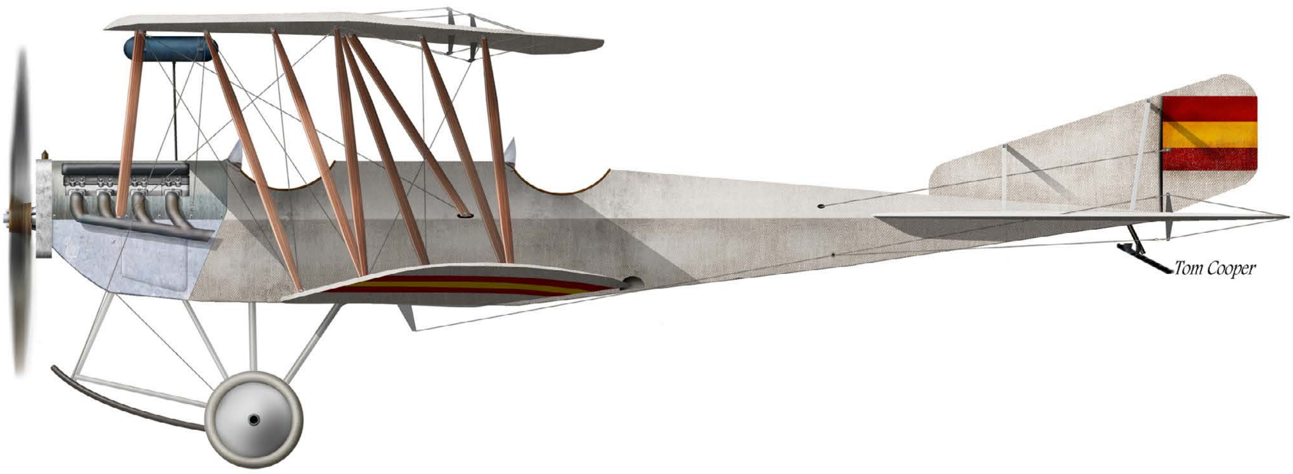
One of the negative aspects of the French mandate over Syria and Lebanon was the way in which France tried to fragment Syria and its people. One nominally independent mini-state which the French established was for the minority Alawi (Alaouite) community in the north-west of the country. It existed from 1920 to 1936 but for an unknown reason the overprinting on the Alawi ten piastre airmail postal stamp included an archaic Bleriot monoplane. (Private collection)

Realising their error, the British authorities now allowed Sa'ad Zaghlul to return to his country. A commission was also set up under Lord Milner to try to find a solution acceptable to both British and Egyptians. Despite being boycotted by many influential people in Cairo, this Milner Commission presented its report in February 1921, recognising the almost universal desire for independence in Egypt and suggesting that the existing British Protectorate was no longer viable. Instead the Commission's report proposed a formal alliance between Egypt and the United Kingdom, which would include a British guarantee of Egypt's territorial integrity. Furthermore, Egypt should become a constitutional monarchy with a parliament.

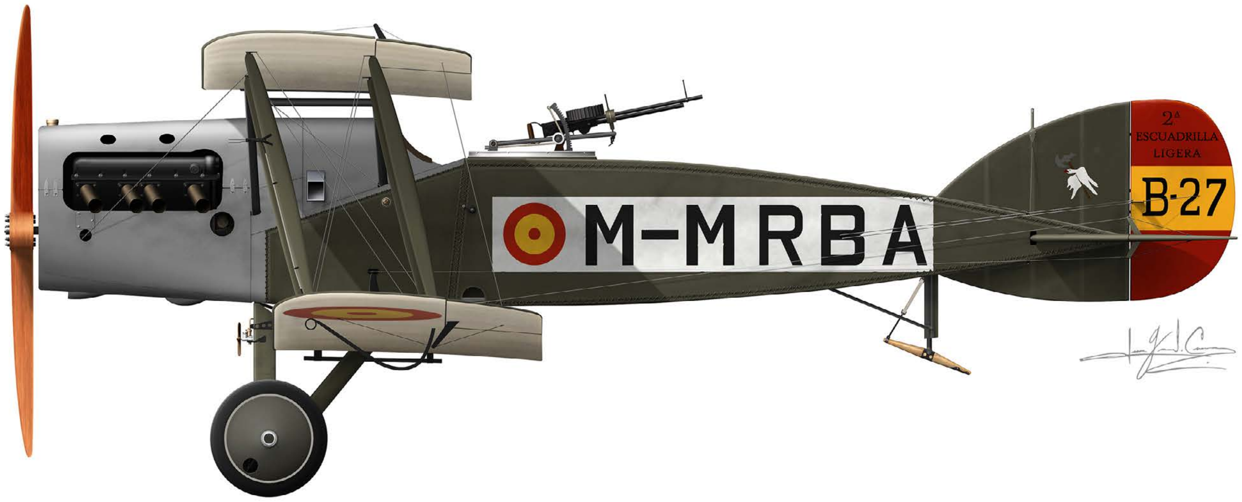
Nevertheless, the British would retain some of their existing powers and privileges, some of which had long been a source of special annoyance to Egyptians. Worst, perhaps, were the old "capitulations" which gave special legal rights to foreigners living in Egypt. Also reserved for the British government were Egypt's foreign relations, communications – most notably the Suez Canal – the Egyptian Army and Coastguard, and the Sudan. Since 1899 and its reconquest from the Mahdists, the Sudan had been a condominium under joint Egyptian and British rule, being known as the Anglo-Egyptian Sudan (then including the two present-day states of Sudan and Southern Sudan).

Unsurprisingly, Milner's report was not acceptable as it stood, so negotiations and tensions both continued, not least in the Sudan. Here there had already been small-scale but ruthlessly crushed uprisings by the Aliab Dinka and Garjak Nuer tribes. The Aliab Dinka of Mongalla province lived to the west of the White Nile in what is now Southern Sudan. Much of their territory turned into a vast swamp during the rainy season (usually from June to December) and it was on 30 October 1919, in the middle of such a season, that an estimated 3,000 Aliab Dinka tribesmen attacked a police post near the town of Bor, north of Juba, killing several policemen and forcing the remainder to flee.

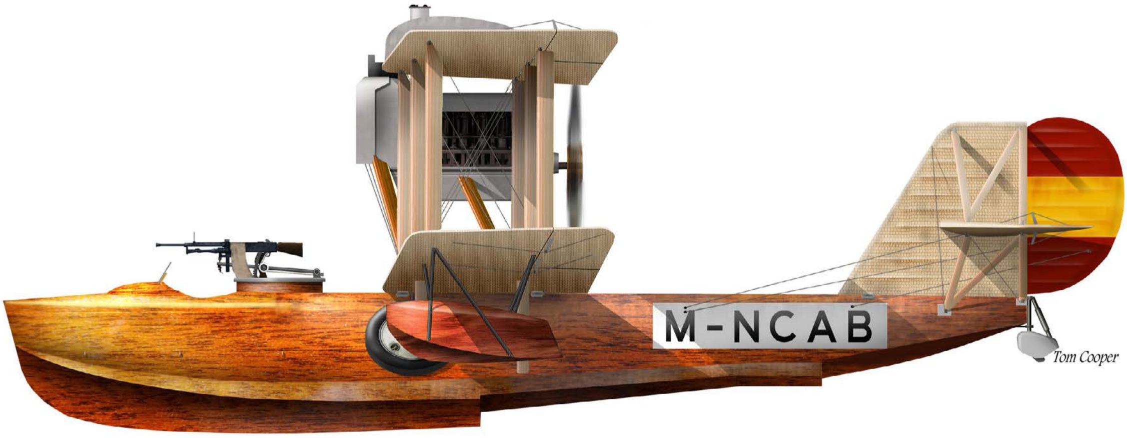
Around the same time some members of the neighbouring Mandari tribe killed men working on a telegraph line, along with the police who accompanied them. An Anglo-Egyptian response was



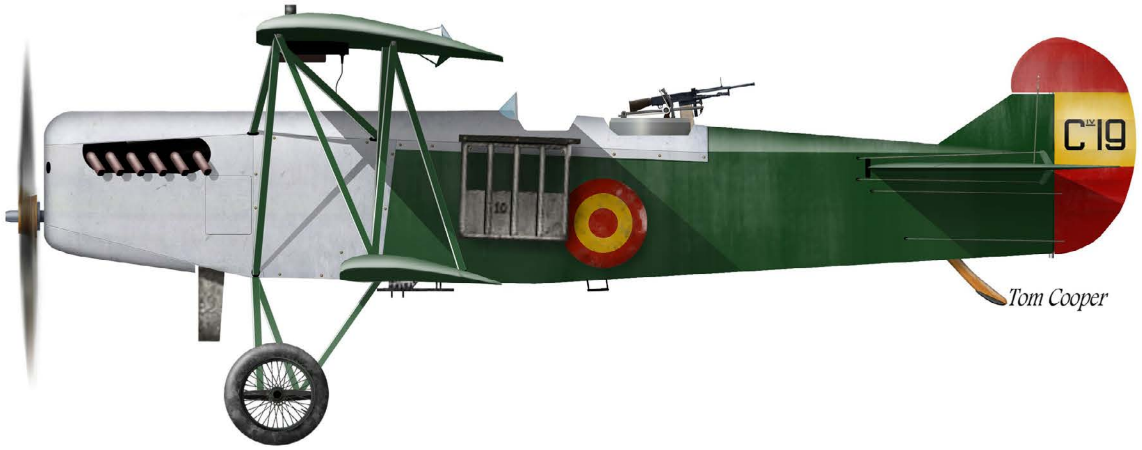
Barrón Type W of the Spanish Servicio de Aeronáutica Militar, Morocco c.1918. Eduardo Barrón produced an uprated variant of his own Barrón Flecha, which was itself based upon the pre-First World War Lohner Pfeilflieger. This came to be known as the Type W because the shape of its lower wings was altered to improve visibility from the observer's cockpit, which was still in front of the pilot. As a result, the leading edges of the lower wings were angled back between the inner inter-plane struts and the lower edge of the fuselage. The single large cockpit of the earlier machines was also replaced by two widely separated crew positions. The other most visible change was that the Type W had a frontal radiator, immediately behind the propeller. The Barrón Type W remained in service, alongside a number of archaic Maurice Farmans at Arcila at the westernmost end of the Spanish Protectorate until 1919. It is possible that some aeroplanes were later painted a dark green on their upper surfaces and sides, though this is not certain. (Artwork by Tom Cooper)



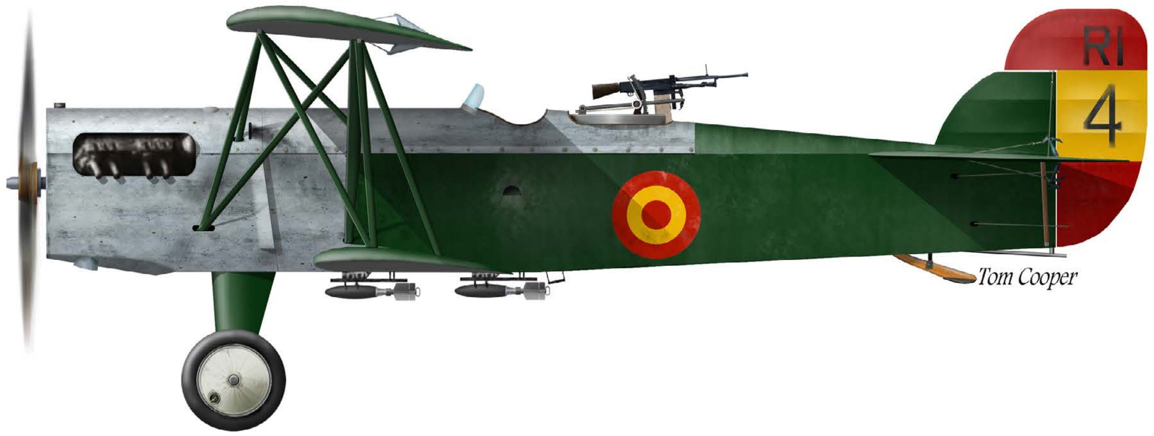
Bristol F2B of the 2º Escuadrilla Ligera, Spanish Servicio de Aeronáutica Militar, Morocco c.1918. In addition to its individual serial number B-27, this Bristol F.2B still has a pseudo-civil registration M-MRBA, added for its transfer from the UK to Spain and retained for some time during its service in the Spanish Protectorate in northern Morocco. The flying bird motif on the rudder is a simplified version of a badge seen on some earlier Spanish aeroplanes, and is probably a squadron rather than an individual marking. The colour-scheme appears to be the same as that used by the British during the First World War, with olive green upper and side surfaces, mid-grey painted engine cowling and clear-doped fabric under-surfaces. The plates covering the tops of the engine cylinders and the long exhaust pipe have also been removed, leaving only the exhaust stubs. (Artwork by Luca Canossa)



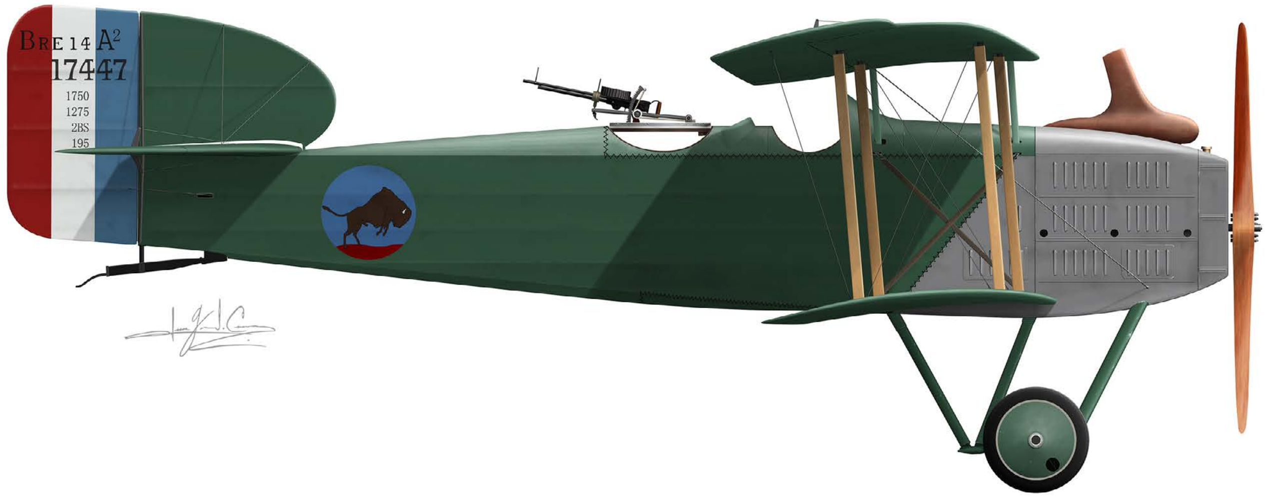
Supermarine Scarab, Spanish Navy mothership *Dédalo,* c.1925. The Supermarine Scarab was a military aeroplane based upon the civilian Sea Eagle but with a pusher engine. As an amphibian, it was designed to land on water or land, though it is shown here with its wheels raised. Twelve were built for Spain to serve aboard the Naval seaplane tender *Dédalo* as bomber/reconnaissance aircraft. The skin of the hull is of varnished wood while the wings, tailplane and elevator were covered in clear-doped fabric. Like other British aeroplanes sold to Spain for military purposes, the Scarabs had pseudo-civil registrations, in this case M-NCAB in large black lettering on a large white rectangle on the rear fuselage. They continued to have these during at least part of their service in the Spanish Navy in addition to Spanish national markings. (Artwork by Tom Cooper)



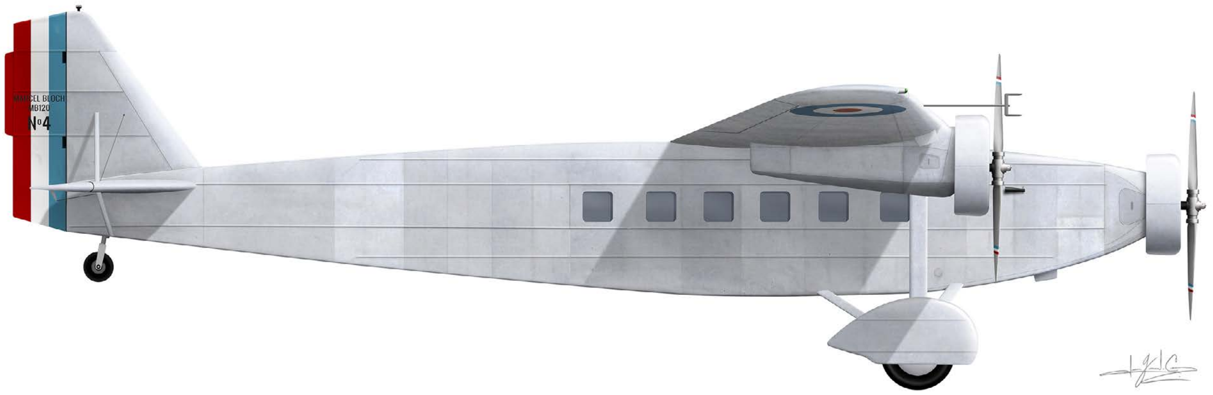
Fokker C.IV (licence-built by Loring), of the Fokker Group, Servicio de Aeronáutica Militar at Melilla, northern Morocco, c.1925-26. The Fokker Group at Melilla was commanded by His Highness Don Alfonso de Orleans y Borbón. This aeroplane is painted overall dark green, except for the bare metal over the engine, and front and upper fuselage. The substantial radiators on the sides of the fuselage are also bare but dulled metal. Some photographs might show a broad, slightly slanted darker band around the rear of the fuselage, but this is very unclear and so has not been included here. Otherwise, the machine has standard Spanish national markings for the period, plus a combined type identification CIV and individual number 19 on the rudder. (Artwork by Tom Cooper)



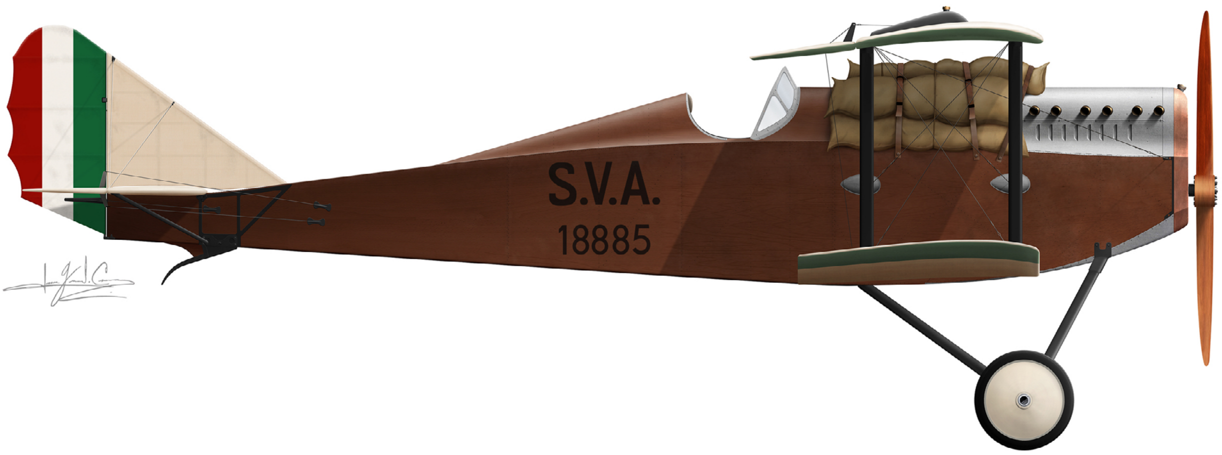
Loring R.I of the Spanish Servicio de Aeronáutica Militar, Titwan, northern Morocco c.1927. The R.I two-seater reconnaissance and light bomber was Eduardo Barrón's first successful product for the Loring design bureau, and by June 1926 a squadron of them had been sent to Titwan in northern Morocco. Like the Fokker C.IV it has the now standard Spanish overall dark green colour including struts and undercarriage, except for dulled bare metal panels over the engine, and front and upper fuselage. On the rudder is the type identification RI, and the individual identification number 4. (Artwork by Tom Cooper)



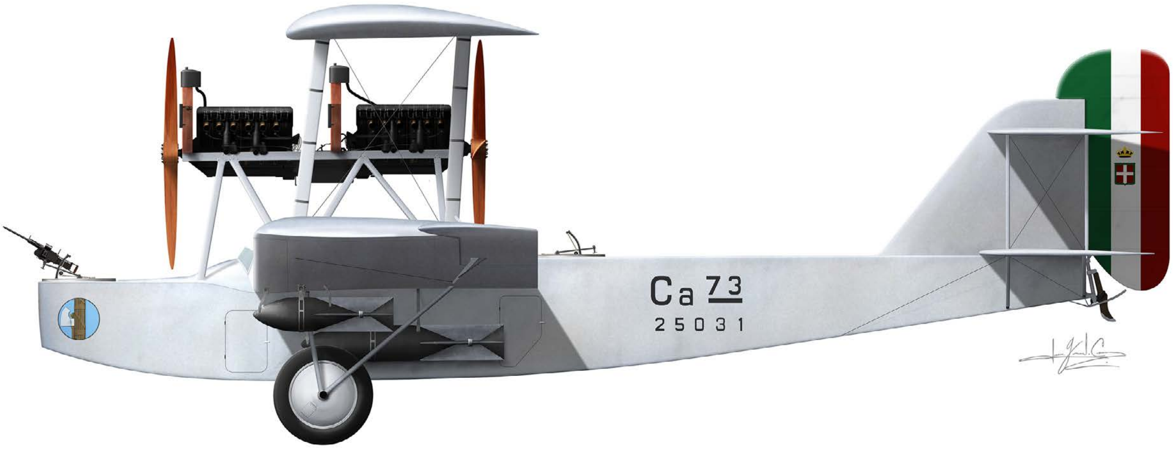
Breguet XIV A2 of the Escadrille de la Garde Cherifienne, Morocco, 1925. The Escadrille de la Garde Cherifienne was theoretically part of the Sultan of Morocco's Army and was sometimes also called the 2nd Lafayette Squadron. In reality it was a French squadron attached to a French Air Regiment. With typical *vert protectif* green on the fabric surfaces and dark grey painted metal engine panels, this Breguet XIV A2 is distinguished by its fuselage insignia of a leaping brown bison. This reflects the American origins of the Escadrille de la Garde Cherifienne's personnel and its tenuous link with the earlier Lafayette squadrons of the First World War French Service Aéronautique. Sometimes, the jumping bison was on a tricolour cockade, though in this case it is on a mid-blue disc, standing on a red ground. (Artwork by Luca Canossa)



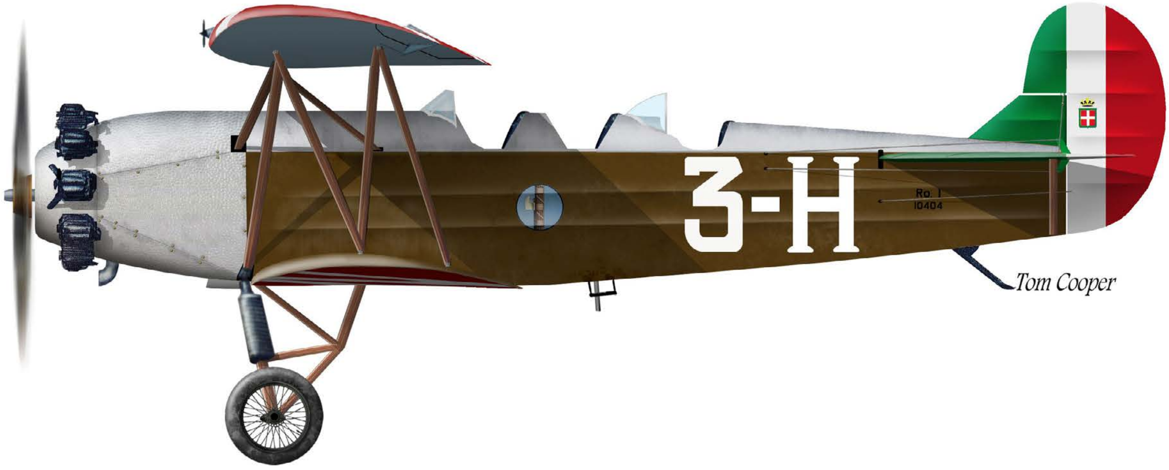
Bloch MB.120 of the 2e Escadrille in French AOF or Afrique occidentale française, mid-1930s. This tri-motor transport was an ex-civilian aeroplane, owned by the French state who loaned it to Air Afrique who in turn loaned it back to the French Service Aéronautique. The civilian markings, registration and other non-military markings were removed, to be replaced by French national insignia on the tail and wings but not the fuselage. Whether the small tricolour stripes on the propeller-blades were added during its military service is unclear. The manufacturer's lettering on the rudder, reapplied after the tricolour had been added, consisted of the usual type identification above the machine's individual number. This particular Bloch MB.120 formed part of 2e Escadrille in North Africa during the mid-1930s. (Artwork by Luca Canossa)



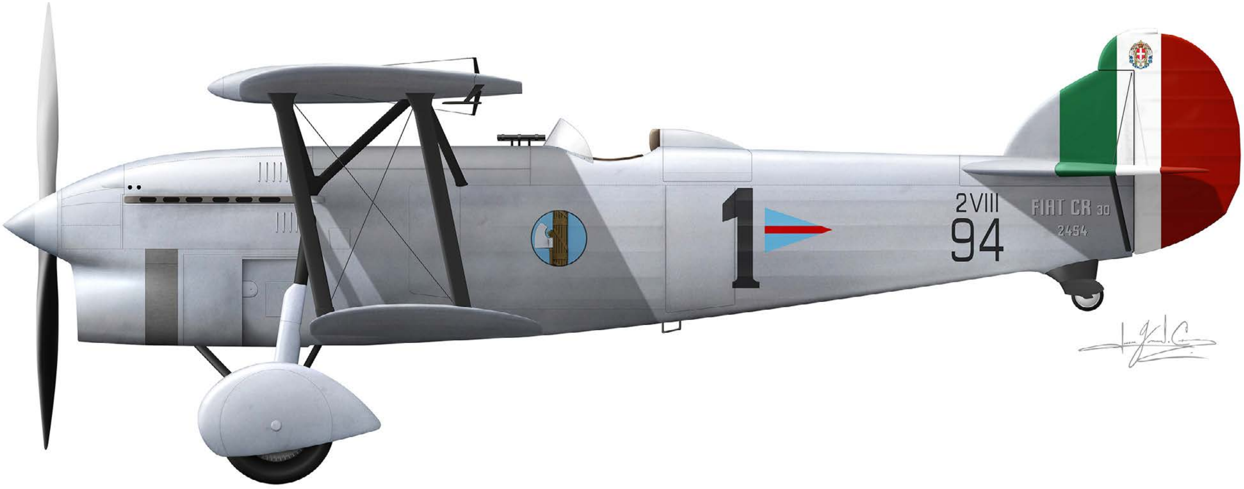
Ansaldo S.V.A.5 of the 89th Squadrigia, Italian Corpo Aeronautico Militare, Tripolitania, Libya, c.1922. The 89th Squadrigia operated S.V.A.5 single-seaters and Ansaldo S.V.A.10 two-seaters. The fuselage is varnished wood, and the fabric is clear doped except where covered with national markings consisting of normal vertical stripes on the rudder and the outer parts of the wings; the latter painted red on the left and green on the right. The engine cowling, only over the upper part of the front of the fuselage, is bare metal. The serial number 18885 is painted in large black numerals beneath the letters S.V.A. on the fuselage behind the cockpit. During the operation to resupply the besieged Italian (Eritrean) garrison of Aziziya in Tripolitania from 9 February to 10 April 1922, the Ansaldo S.V.A.5 single-seater could carry six bags of flour. These were strapped to the fuselage between the cockpit and the engine – the machine guns having been removed – using fastening points on the upper longerons of the fuselage. In this example the sacks have been arranged two lengthways each side, plus two on top, one lengthways and one crossways. (Artwork by Luca Canossa)



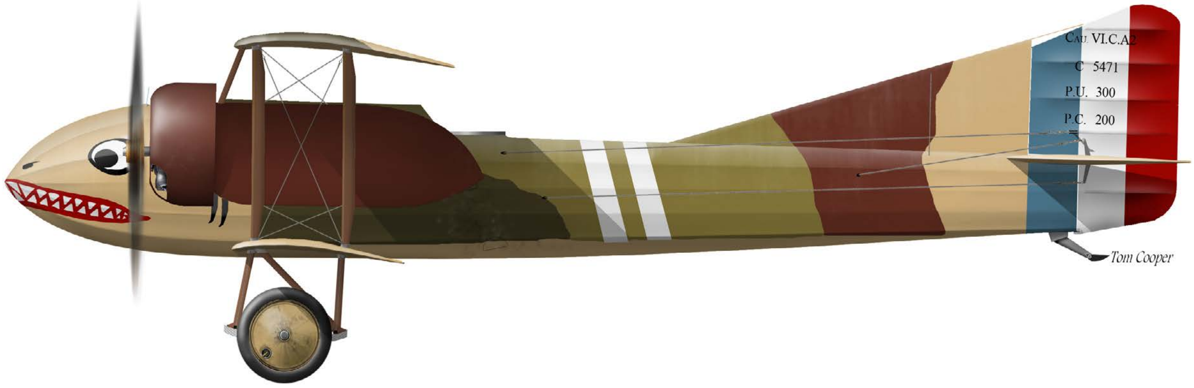
Caproni Ca.73 of the XII Squadrigia of the Italian Corpo Aeronautico Militare, Libya, 1927-29. The XII Squadrigia was the first Italian flying unit in Libya to be equipped with these aeroplanes and was initially based in Tripolitania. The Ca.73 is in overall silver doped fabric with traditional Italian tricolour national marking on the rudder with a simple form of the coat-of-arms of the Kingdom of Italy, plus a large Fascist fasces symbol on the front fuselage. Beneath the large type identification, Ca.73, on the rear fuselage is the aeroplane's MM (Matricola Militare) serial number 25031. This bomber version of the Ca.73 had the same two Lorraine 410hp engines as the civil airliner prototype, but the metal fairing or cowling around and between the engines was normally removed for service in Libya. (Artwork by Luca Canossa)



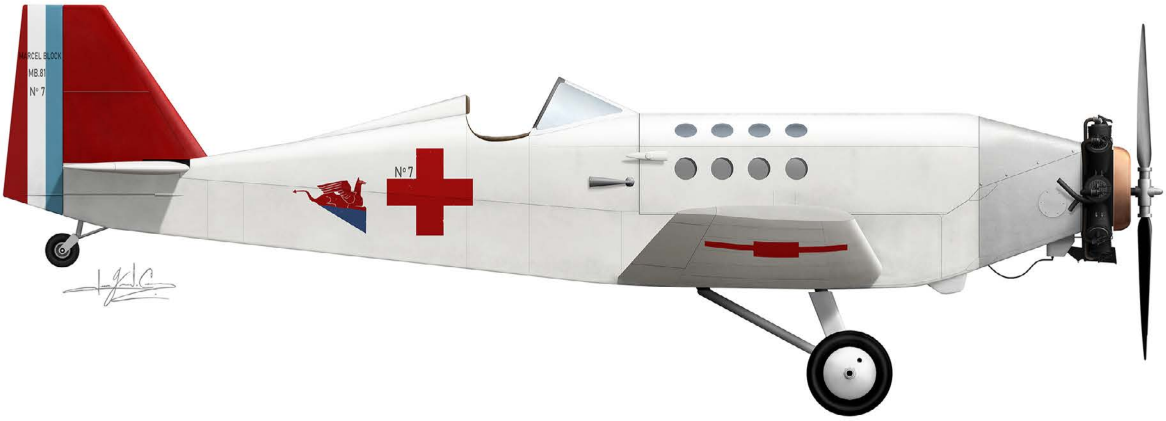
Romeo Ro.1 of the Italian Regia Aeronautica, Libya, c.1931. The Romeo Ro.1 was a licence-built version of the Dutch Fokker C.V-E, constructed by the Officine Ferroviarie Meridionali. A version with three cockpits was later produced with a rear position added for a passenger or a casualty to be evacuated across hostile territory. This example probably formed part of 89th Sq. based in Tripoli in 1931. Its identification code read as H-3 on right side of the fuselage and 3-H on the left side. The overall colour of the aircraft was probably *marrone* or mid-brown, but the engine cowling and the top of the fuselage are bare beaten aluminium panels. There are also high visibility zigzag bands on the upper wing in white on either red or *marrone*. The tricolour national markings on the tail include the rudder and the tailfin, going around the upper and lower surfaces of the tailplanes and elevators but not the rear fuselage. (Artwork by Tom Cooper)



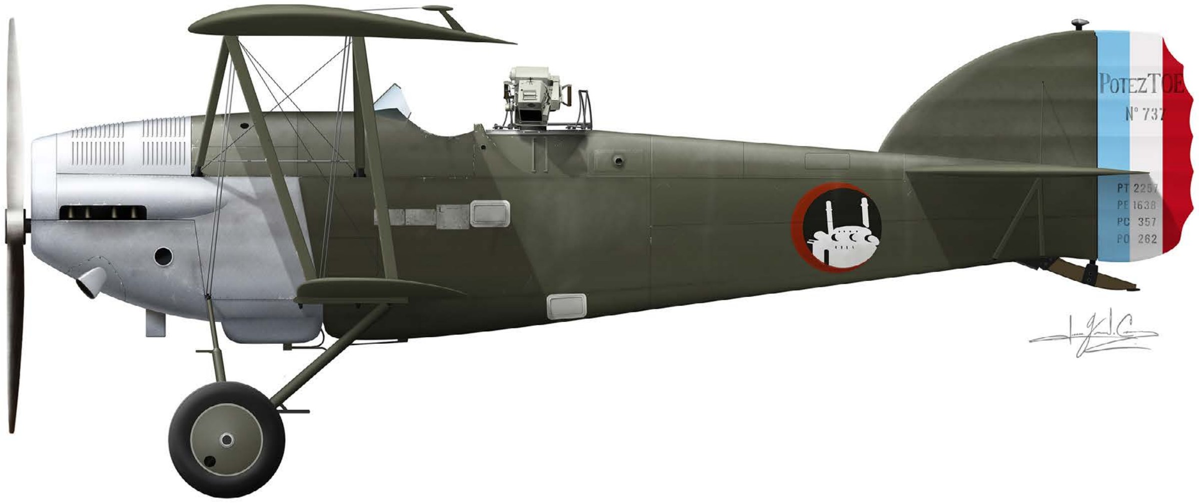
Fiat CR.30 of the Italian 2nd Stormo Caccia Terrestre, Libya 1935-36. In 1935, the 2nd Stormo Caccia Terrestre under Col. Mario Fucini was sent to Libya. It included VIII Gruppo which defended Tobruk during tension with the British in neighbouring Egypt. The aeroplane is overall silver doped with the fasces symbol beneath the front of the cockpit, Italian national insignia on the tail which go across and around the upper and lower surfaces of the tailplanes but not around the rear of the fuselage. There is a detailed form of the coat-of-arms of the Kingdom of Italy near the top of the rudder. Each aircraft also had a large identification number on the fuselage behind the cockpit. Number 1 was flown by the *Commandante di Squadrigia* and therefore has a light blue and red painted pennon behind the number. Each machine also had a type identification and MM number on the rear of the fuselage as well as its full squadriglia, gruppo, stormo and individual number beneath the leading edge of the tailplane. (Artwork by Luca Canossa)



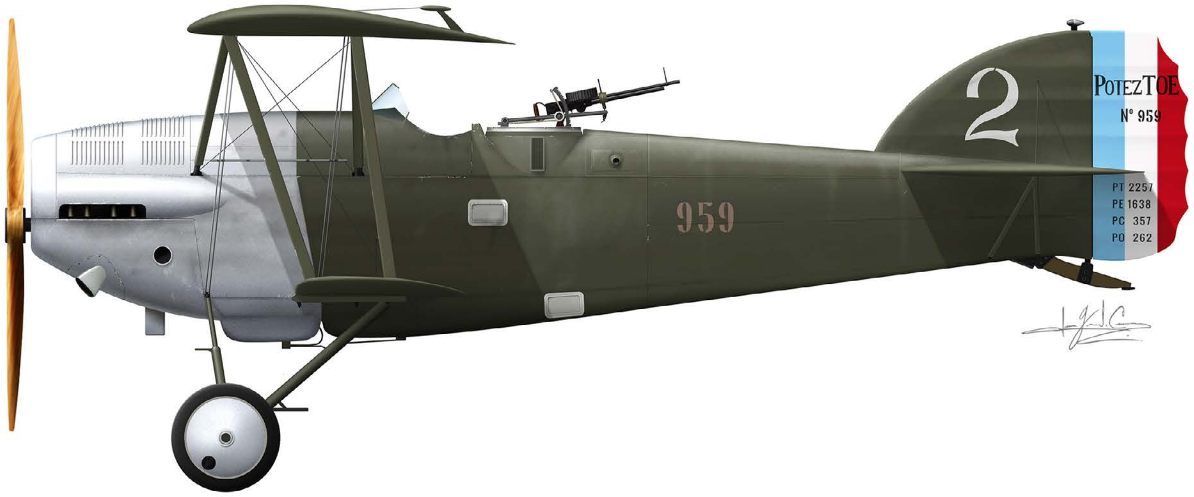
Caudron G.6 A2 of Escadrille C 575, French Service Aeronautique, Port Said, early 1919. This is a later version of the First World War reconnaissance bomber, with a larger, longer, straight-topped tail fin. While the underneath of the wings, tailplanes and fuselage are clear-doped fabric, the upper surfaces and sides of the fuselage are painted a multi-colour camouflage. In addition to standard French national markings, the machine has a pair of sloping white stripes on the sides and top of the rear fuselage and a pair of narrow, short red or black vertical stripes on the front fuselage below the pilot's cockpit which might represent a fish's gills. The nose of the fuselage was decorated with red and white shark or other fish's mouth, teeth and eyes but the colours used are uncertain. The dark colour on the metal engine cowling and fabric fairings behind engines has here been interpreted as the same brown used on part of the fuselage and wings, while the lighter wheel covers have been interpreted as the light tone used on the fuselage. (Artwork by Tom Cooper)



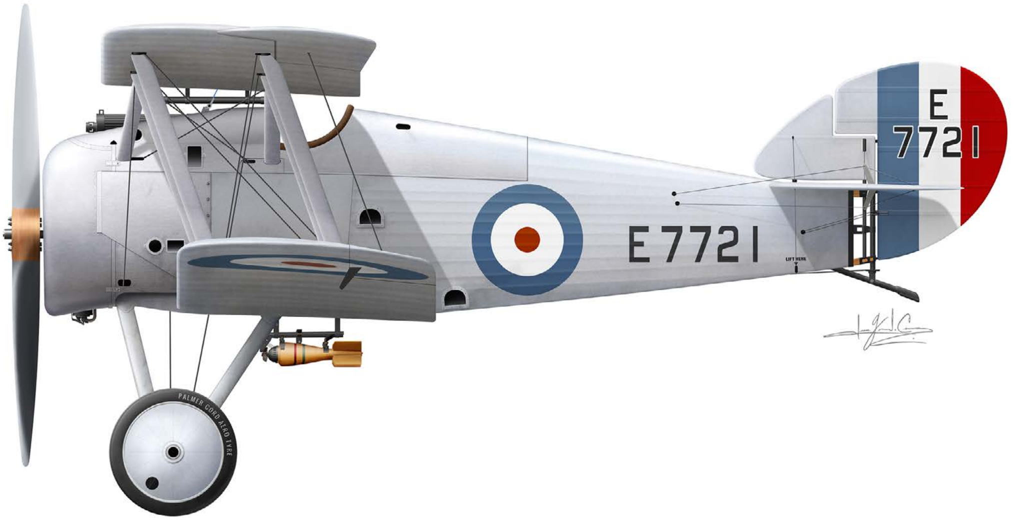
Bloch MB.81 Sanitaire of the French 3e Escadrille of the 39e Escadre du Levant, mid-1930s. The Bloch MB.81 Sanitaire was one of the earliest specially designed French casualty-evacuation aeroplanes. This example was in service with 3e Escadrille of the 39e Escadre du Levant in Syria and Lebanon during the mid-1930s. With red crosses instead of French national markings – other than the stripes on the rudder – this machine would not expect to be fired upon by an enemy. Its attachment to the 3e Escadrille is nevertheless shown on the fuselage in the form of squadron insignia consisting of a chimera on a triangle. (Artwork by Luca Canossa)



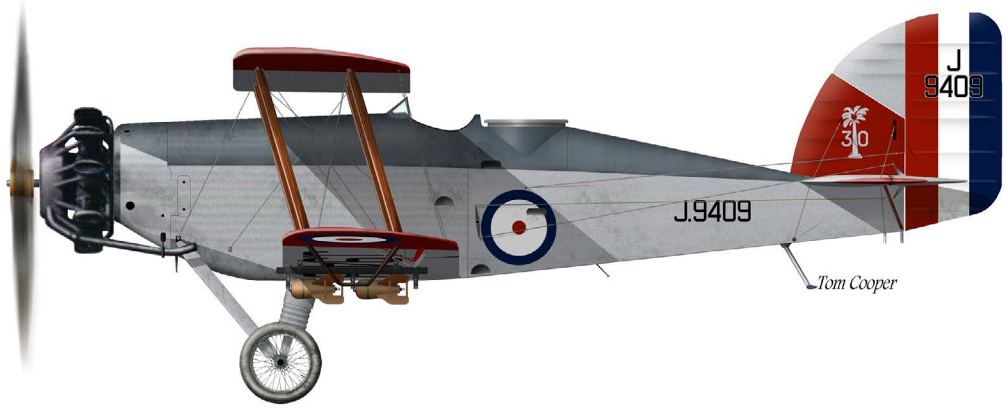
Potez 25TOE, 39th Regiment of the French Service Aeronautique, Syria c.1932. The Potez 25TOE was used in substantial numbers by the French Service Aeronautique over a prolonged period. This example, serial number 737, formed part of the 4e Escadrille of the 39th Regiment (39e RAO) which supported Père Antoine Poidebard in his aerial archaeology photographic work. The fuselage squadron insignia consisting of a domed mosque with two minarets within a crescent moon, belonged to the 4e Escadrille. Otherwise, the machine is in standard overall *vert protectif,* including the interplane struts, undercarriage and wheel hubs, plus broad high visibility stripes on top of the upper wings (not visible here). While working with Père Poidebard, the observer's machine gun was replaced by a 26cm focal length aerial camera. (Artwork by Luca Canossa)



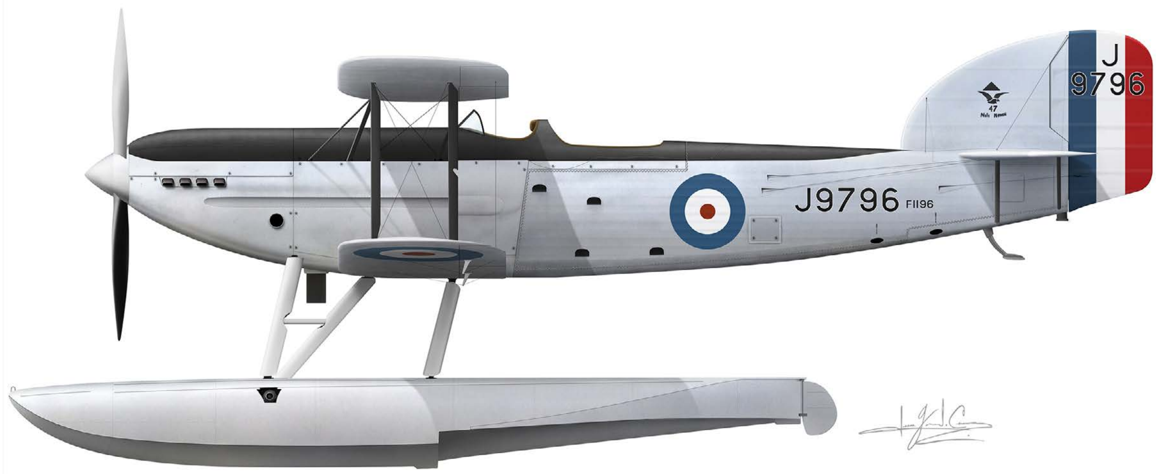
Potez 25TOE of the 2e Escadrille of 1/39th Regiment in Lebanon, c.1936. With serial number 959 and the individual identification number 2, this Potez 25TOE may be a newly arrived machine as it lacks the squadron insignia which was so popular in the French Service Aeronautique at this time. It has the standard overall *vert protectif* used in Europe and throughout the French colonial empire, plus broad white high visibility stripes on top of the upper wings (not visible here). The engine cowling is bare aluminium, as is the panel on top of the front of the fuselage extending back as far as the rear pair of struts between the fuselage and upper wings. The extent to which this unpainted upper fuselage panel varied between different machines remains unknown. The TOE version also had a slightly deeper fuselage than the standard versions of the Potez 25. (Artwork by Luca Canossa)



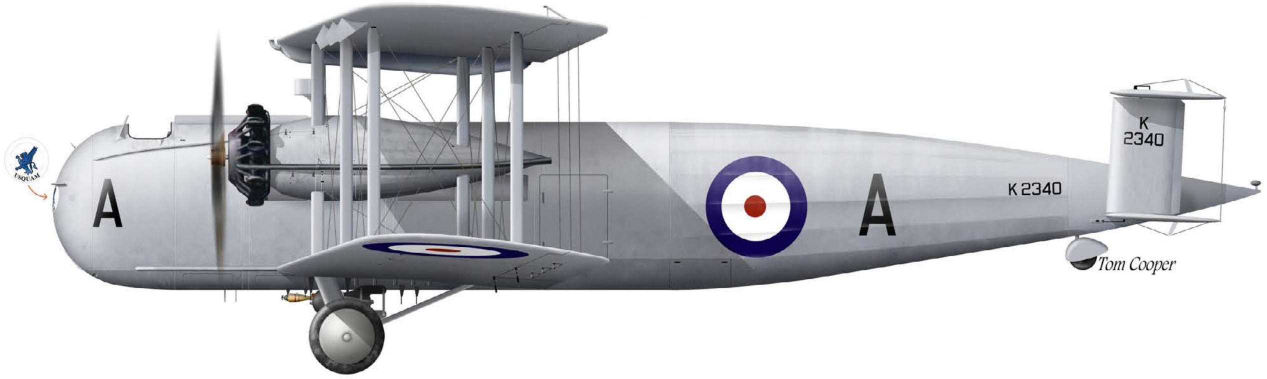
Sopwith Snipe of No. 1 Squadron, RAF, Iraq, c.1922. The aeroplane is an overall aluminium doped colour, including the inter-plane and undercarriage struts, with a bare metal engine cowling. There were no squadron identification insignia on No. 1 Sq. Sopwith Snipes in Iraq during this period, although some other RAF squadrons in the UK would have them from 1924 onwards. Similarly, there were no individual identification numbers on the fuselages of No. 1 Sq. Snipes until 1926. All that distinguished machines from one another was their serial numbers, in this case E7721, applied in quite large black lettering on the rear fuselage and rudder. The serial number was not written beneath the lower wings of operational aircraft at this time, only becoming normal from 1927, though it was often seen on training aircraft at an earlier date. Otherwise, the aeroplane only has normal RAF national markings. (Artwork by Luca Canossa)



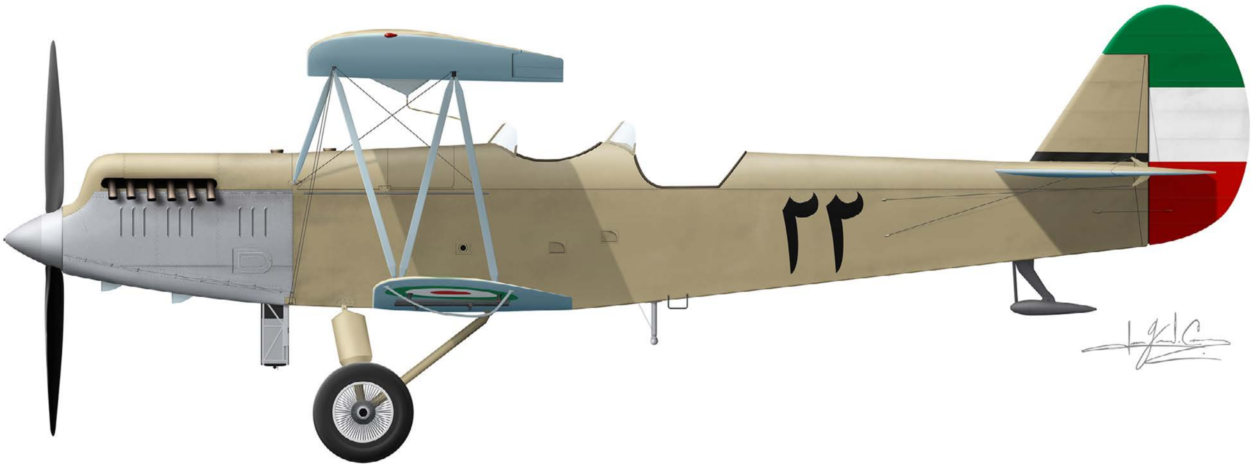
Westland Wapiti of No. 30 Squadron RAF, Iraq, c.1930. The army-cooperation Wapiti was a rugged machine designed for operations in imperial or colonial operations such as those in Iraq. Powered by a Bristol Jupiter VI nine-cylinder engine, this example, serial number J9409, is in overall aluminium dope except for the upper fuselage which is mid-grey to reduce glare for the crew. The tips of the wings, the outer half of the tailplanes and the elevators, and the tailfin are painted red to make any aeroplane which was forced to land in potentially hostile territory more visible to rescuers. The squadron emblem consisting of a palm tree, and the number 30 was either stencilled in aluminium silver on the tailfin or had been left unpainted when the tailfin was painted red. (Artwork by Tom Cooper)



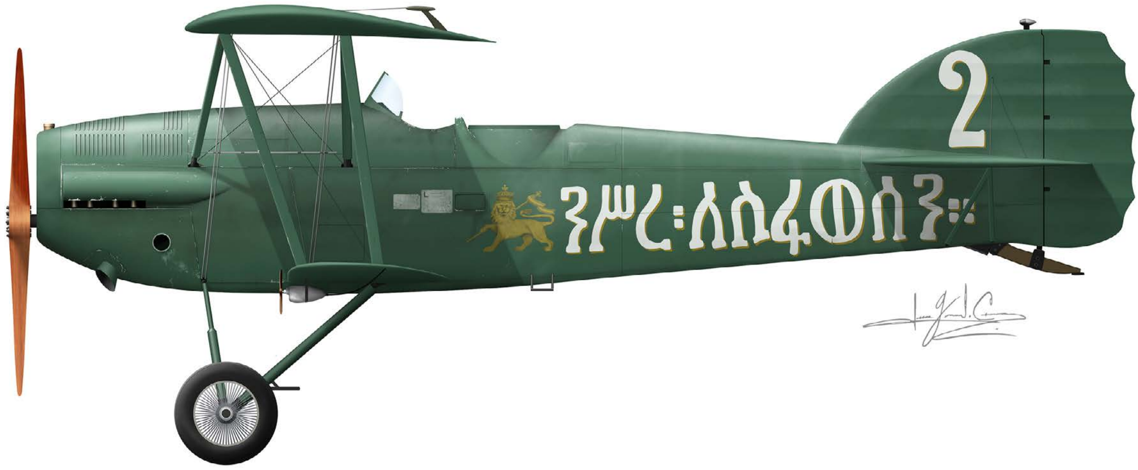
Fairey III F Mk.IV of No.47 Squadron, RAF, Sudan 1930. No. 47 Squadron RAF, based in Khartoum, operated both the Fairey III F Mk.IV floatplane and the Fairey III F landplane. The machine is overall silver doped and bare metal except on top of the fuselage and engine cowling which is painted matt black to reduce glare. Otherwise, the aeroplane has standard British national markings and serial number J9796 on rudder and rear fuselage, outlined in white. The serial number is also beneath the lower wings, seen from the front on the left wing and from the rear on the right wing. There is a small construction number F1196 in black on the rear fuselage and a squadron insignia on the tailfin, consisting of a pyramid over a bird in flight with the number 47 beneath. The curved line of writing is too short to be the full squadron motto, *Nili Nomen Roboris Omen,* but might be only *Nili Nomen*. (Artwork by Luca Canossa)



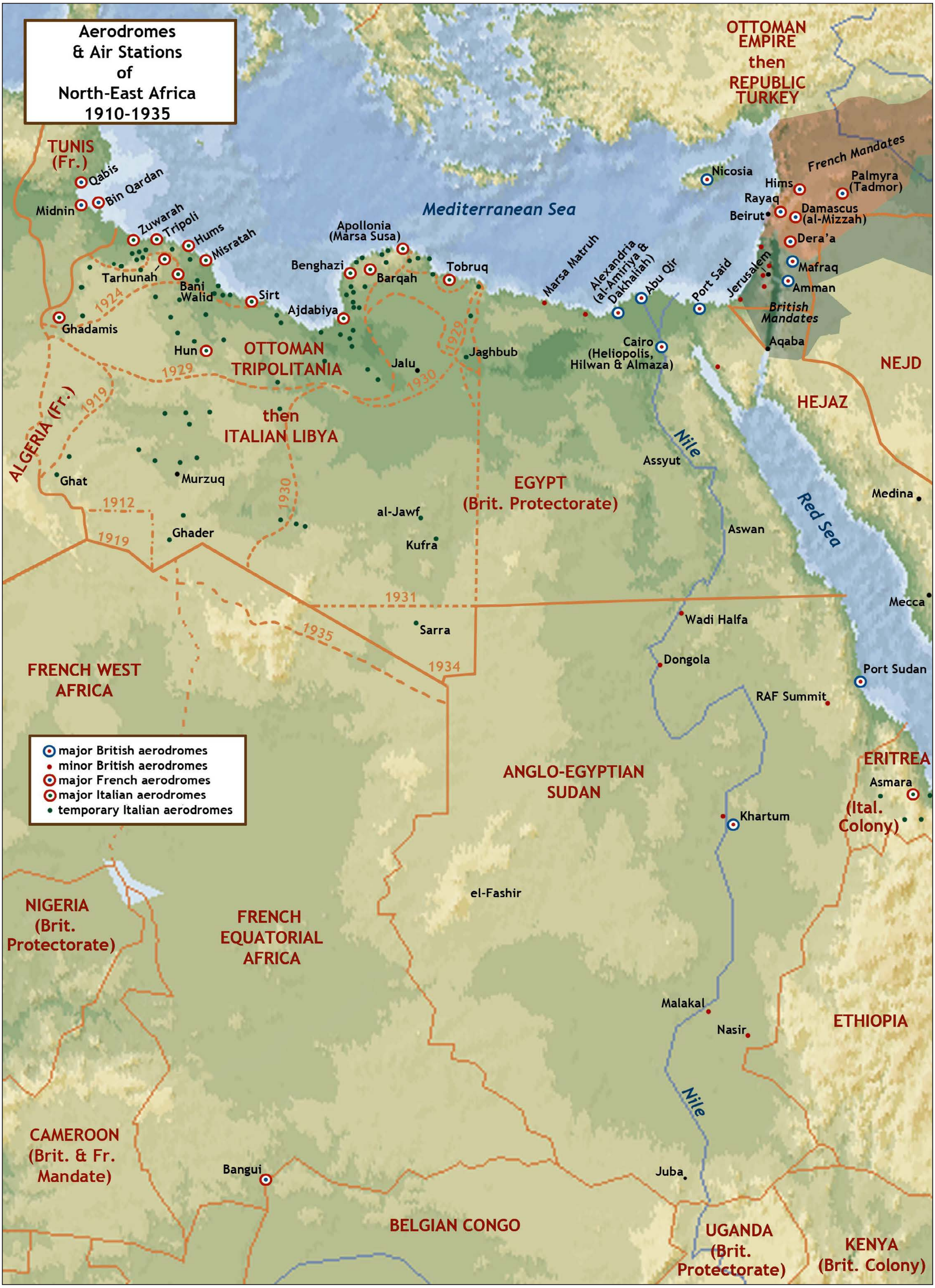
Vickers Type 264 Valentia of No. 70 Squadron RAF, Iraq, c.1935. No. 70 Squadron RAF was based in Iraq and operated across most of the Middle East and as far as India in the mid to late 1930s. Valentias had replaced the squadron's Vickers Type 56 Victorias in 1934 and his machine, serial number K2340, had originally been built as a Victoria Mk. V with Napier Lion XIB engines. These were replaced by Bristol Pegasus II engines to upgrade the aeroplane as a Valentia before being issued to No. 70 Sq. In overall aluminium dope, it has standard British roundels but lacked RAF rudder stripes. The serial number was also written in larger black lettering under the lower wings where it read from the rear on the right side and from the front on the left. Its individual identification code letter A is written on the front and rear of the fuselage, while No. 70 Squadron's badge, consisting of a blue "demi-winged lion" with a red tongue, is painted on the front of the nose with the squadron motto USQUAM in a scroll beneath. This Valentia also has two racks each for four small bombs beneath the fuselage, and four racks for single large bombs beneath the wings close to the fuselage. (Artwork by Tom Cooper)



Polikarpov R-1 of the Imperial Iranian Air force, c.1933. Ten Polikarpov R-5 reconnaissance aircraft were purchased for the Imperial Iranian Air force from the Soviet Union in 1933. However, the only serial known is 22, as shown here. Iranian Polikarpov R-5s had a two-tone colour-scheme with the upper surfaces and the sides of the fuselage appearing only slightly darker than the lower surfaces in the few available monochrome photographs. Here this has been interpreted as a pale brown for upper and side surfaces, with a pale sky-blue underneath. There are bomb-racks beneath the fuselage, and probably also beneath the wings, but no gun-mounting on the observer's cockpit. (Artwork by Luca Canossa)



Potez 25.53 A2 of the Imperial Ethiopian Air Force, c.1930. This Potez 25, identification number 2, was one of six delivered to the Imperial Ethiopian Air Force in 1929. It is also believed to have been the only one to survive the subsequent Italian conquest of Ethiopia intact. All were unarmed and the colour scheme was the same as that applied to Potez 25 aeroplanes in French service, with the entire aeroplane including the engine cowling, being *vert protectif* dark green. The white identification number 2 on the tailfin was originally "shadowed" or partially edged in yellow or gold, as was the inscription, probably in the same colour as the Lion of Judah motif on the fuselage. The large Amharic inscription on aircraft number 2 can be translated as "The Bird of the Crown Prince" but by the time of the Italo-Ethiopian War in 1934-35, it had been removed and engine cowlings appear to have been bare metal. (Artwork by Luca Canossa)


Aerodromes & Air Stations of North-East Africa 1910-1935
major British aerodromes
minor British aerodromes
major French aerodromes
major Italian aerodromes
temporary Italian aerodromes
Mediterranean Sea
Red Sea
Nile
Nile
TUNIS (Fr.)
ALGERIA (Fr.)
OTTOMAN TRIPOLITANIA then ITALIAN LIBYA
EGYPT (Brit. Protectorate)
OTTOMAN EMPIRE then REPUBLIC TURKEY
French Mandates
British Mandates
NEJD
HEJAZ
ANGLO-EGYPTIAN SUDAN
FRENCH WEST AFRICA
FRENCH EQUATORIAL AFRICA
NIGERIA (Brit. Protectorate)
CAMEROON (Brit. & Fr. Mandate)
BELGIAN CONGO
UGANDA (Brit. Protectorate)
KENYA (Brit. Colony)
ETHIOPIA
ERITREA (Ital. Colony)
Qabis
Bin Qardan
Midnin
Zuwarah
Tripoli
Hums
Misratah
Tarhunah
Bani Walid
Sirt
Ghadamis
Hun
Ghat
Murzuq
Ghader
Apollonia (Marsa Susa)
Benghazi
Barqah
Tobruq
Ajdabiya
Jalu
Jaghbub
al-Jawf
Kufra
Sarra
Marsa Matruh
Alexandria (al-Amiriya & Dakhaliah)
Abu Qir
Port Said
Jerusalem
Cairo (Heliopolis, Hilwan & Almaza)
Assyut
Aswan
Wadi Halfa
Dongola
Port Sudan
RAF Summit
Khartum
el-Fashir
Malakal
Nasir
Juba
Bangui
Asmara
Nicosia
Hims
Rayaq
Beirut
Damascus (al-Mizzah)
Palmyra (Tadmor)
Dera'a
Mafraq
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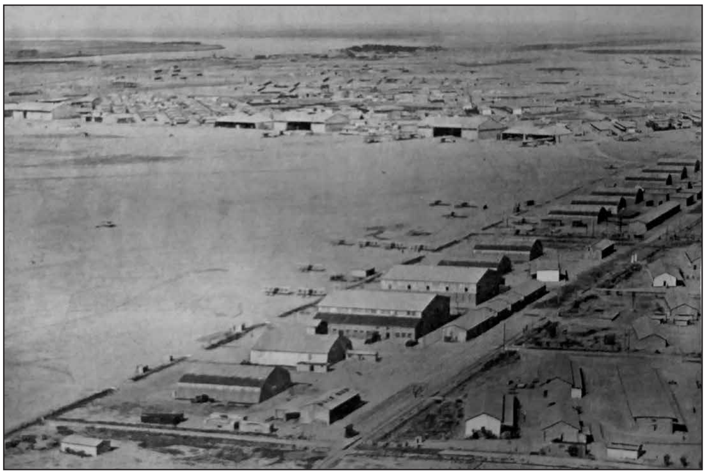


Hinaidi aerodrome in central Iraq, photographed from an altitude of 200 feet (61 metres) by an RAF aircrew in March 1924. Visible are the hangers of Nos. 30, 8 and 1 Sqs. (near side) and of Nos. 45 and 70, with the Aircraft Depot and HQ of the RAF Armoured Car Companies further away. (Author's collection)

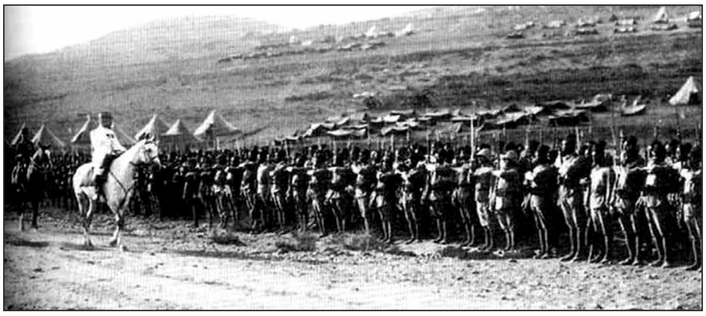
not long in coming, when the Provincial Governor, *Amir Alay* (Col.) C.H. Stigand of the Royal West Kent Regiment, sent *Qa'im-Maqam* (Lt. Col.) R.F. White of the Essex Regiment with some companies of the Egyptian Army's Equatorial Battalion to restore order.

Stigand accompanied this little expedition in person, but clearly made major tactical errors. About a thousand Aliab Dinka tribesmen, most armed only with spears, attacked the Anglo-Egyptian column as it was marching through tall grass, killing Stigand, White and *Yuzbashi* (Capt.) Sa'ad Osman, who was the senior Egyptian officer present, along with 24 soldiers and porters. The remaining soldiers rallied under *Bimbashi* (Lt. Col.) Frank Crowther Roberts of the Worcestershire Regiment and forced the Dinkas to retreat, but British prestige had suffered a significant blow.

A substantial Egyptian Army force was now prepared, consisting of five Equatorial Battalions, Mounted Infantry, Camel Corps, with an artillery battery and a machine gun company, to be accompanied by troops from the local Bahr al-Ghazal Territorial Unit who had knowledge of the terrain. This was the Egyptian Army's biggest operation since the end of the First World War. Although the Aliab Dinka rebels, their families and their cattle avoided the Anglo-Egyptian patrols for some time, the end was never really in doubt. Eventually the Aliab Dinka Campaign, as it came to be known, resulted in the deaths of more than 400 Dinka, Atwot and Mandari tribesmen. Many villages were destroyed and some 7,000 cattle seized. The leader of this rising, Kon Anok surrendered and subsequently died of poison – supposedly having committed suicide.

This almost forgotten post-war colonial operation lasted from 8 November 1919 to 6 May 1920 and was undertaken without any form of aerial support. The most readily available British records only mention British personnel who were subsequently awarded medals for their part in the affair. They included two British officers of the Egyptian Royal Army Medical Corps, *Bimbashi* Heriot-Hill and *Bimbashi* Arnott, who both received Egypt's Order of the Nile (Fourth Class), plus the Aliab Dinka Clasp. Some Egyptian officers were also rewarded (see Volume Four).

Meanwhile trouble flared up late in 1919 amongst the Garjak Nuer in the north-eastern corner of what is now South Sudan. It was similarly ruthlessly crushed, though this time with the help of the RAF, and the participation of a named Egyptian Army medical officer. *Bimbashi* Iskander Abdo Agami, like his British colleagues who were facing the Aliab Dinka, would be awarded the Aliab Dinka Clasp which was added to his existing silver Khedival Sudan Medal.



French General Henri Gouraud on horseback, inspecting French colonial troops at Maysalun either just before or immediately after the Battle of Maysalun Pass, also known as the Battle of Khan Maysalun, in which the forces of King Faisal of Syria were defeated on 24 July 1920. (October War Panorama Museum, Damascus)

By the end of his military career Iskander Agami also received the highly prestigious Order of the Nile.

As was usual after such events, the British blamed the Egyptian administration of the Sudan. *Amir Alay* C.H. Stigand's successors also pointed a finger at the local Egyptian *ma'mur* or governor who, they claimed, had triggered the revolt by abusing his authority. Although the ma'mur was summarily removed, he was not replaced, so the Aliab Dinka were left without any real government administration.

At the end of the First World War, British, British Imperial and British Dominion forces occupied the Ottoman *wilayats* or provinces of Basra, Baghdad and most of that of Mosul, along with the wilayats of Jerusalem, Beirut, Syria, Lebanon, Dayr al-Zur, the bulk of that of Aleppo as well as parts of Adana and Diyarbakr. The first three of these would, with adjustments largely reflecting the Anglo-French Sykes-Picot Agreement of 1916, eventually become the mandated territory of Iraq. The others would become the British mandate territories of Palestine and Transjordan, and the French mandate territories of Syria and Lebanon.

In what would become Iraq, the British forces of occupation almost immediately faced general and widespread political opposition. An armistice with the Ottoman Empire, the end of the First World War and the withdrawal of Ottoman Turkish forces did not mark the end of some degree of armed resistance, though this was itself politically and geographically fragmented. In these circumstances there were powerful voices within the British government, most notably Winston Churchill – the Secretary of State for War from 18 January to 13 February 1921 – who urged the use of poisoned gas "against recalcitrant Arabs" and subsequently against even more determinedly hostile Kurds.

Amongst the earliest and most specific British government documents on this difficult subject was a memo concerning the "Employment of gas against uncivilised tribes". Dated 23 May 1919 and sent by Air Comm. Robert Marsland Groves, the Deputy Chief of the Air Staff at the War Office and Director Operations and Intelligence, it stated:

> Application has been received from 31st Wing (RAF) for gas bombs for use against recalcitrant Arabs, the suggestion being concurred in by General Staff, Bagdad …
>
> I understand that S. of S. of War Office [Winston Churchill, British Secretary of State for War 18th January to 13th February 1921] ... has approved the general policy of using poisonous gas against uncivilised tribes … So far, although considerable time and trouble was expended on research during the [First World] war, we have not yet evolved suitable and practicable gas bombs for use from aircraft. Will you please inform me if War Staff opinion is in favour of applying the S. of S.'s general policy to

> aircraft bombs in addition to other forms of warfare. In any event I think that many months must elapse before we shall be in a position to use them and of course the money now available for research and special production is strictly limited.

Several years would also pass before attitudes changed and the United Kingdom – unlike Italy and France – would never actually use such weapons, though initially for practical rather than moral reasons. Air Comm. Groves meanwhile became Acting Air Officer Commanding RAF Middle East Area in 1919 and Air Officer Commanding Egyptian Group in 1920. He died on 27 May 1920 as a result of injuries suffered in a crash, being buried at the New British Protestant Cemetery in Cairo.

Until 1920 the Syrian wilayats formed part of the Franco-British Occupied Enemy Territory Administration (OETA), which had first been established by Gen. Allenby in December 1917 in Palestine. This area later became OETA South and by the end of the war there were two further such territories: OETA North which consisted of the old wilayat of Lebanon, plus Beirut and the coastal area of the wilayat of Aleppo, and OETA East which consisted of the wilayats of Damascus, the rest of the wilayat of Aleppo and the *western* part of the wilayat of Dayr al-Zur. The end of the First World War was followed by a period of intensive negotiation, accompanied by a threat of conflict with the soon-to-be established Republic of Turkey, over the frontiers between Turkey, the British Mandate of Iraq and the French Mandate of Syria. It would take time to agree new frontiers.

Following the end of the Great War, Faisal Ibn Husayn Ibn Ali al-Hashemi, who later became King Faisal I of Iraq, briefly ruled as King of Syria when a self-declared but otherwise unrecognised Hashemite Kingdom was established there. At that time British forces were in occupation of most of the settled areas of Greater Syria, including its cities and most important towns. There was also a small RAF presence in the country, including a detached flight of Bristol F.2B Fighters with their crews and ground personnel. This took over the abandoned ex-Ottoman aerodrome at al-Mazzah, just south of Damascus, which would become the birthplace of the Syrian Air Force in 1946. One of the first to arrive was F.R. Wynne (later Group Captain F.R. Wynne MBE) who wrote:

> In time we came out of [Damascus] ... on to an open mud road running south which eventually passed the aerodrome. A track then took us down one side of the 'grass mud' field to the hangers and camp on the southwest corner. There were some semi ruined stone buildings which had apparently been used by the Germans and Turks as hangers. Parts of them still housed some of our Bristol Fighters. There was also, I think, a Bessonean [canvas] hanger to house the remainder.

Even before the formal establishment of the short-lived Hashemite Kingdom of Syria, the Amir Faisal Ibn Husayn was eager to strengthen his position by cultivating local power groups including, of course, the British. That was why the young pilot, F.R. Wynne, found himself and his comrades amongst those invited to the Amir Faisal's palace in Damascus:

> He [Faisal Ibn HusaynIbn Ali al-Hashemi] had acquired a large and delightful house in Damascus which he had rigged up as a palace. Having completed his palace, he decided, very reasonably, to throw a party and invited all the surrounding 'very important people' including the officers of the British garrison and not excluding our rather small and disreputable detached flight.
>
> We felt rather a shaggy lot to go to a Royal Party! No one had been to a decent tailor or clothes shop since the war. However, this was a party not to be missed. We accepted, and decided to do the best we could with ourselves.
>
> When the evening came, we ... borrowed any respectable articles of clothing he possessed and set forth in the flight Ford, arriving in due course at the portals of the 'Palace'.
>
> Once inside, the situation was quite delightful. The evening was warm and clear with a bright moon, the garden was large, well treed and set on little hills. Broad paths led all around and the trees were tastefully lit with coloured bulbs.
>
> We were ushered up to the Emir in front of the house ... we made ours bows, shook hands and were then let loose in the charming maelstrom below.
>
> We sauntered off. Under every other tree was set a table covered with delightful eatables, both European and Oriental, which we sampled with glee.
>
> The Emir, being the soul of hospitality, evidently believed that the British drank continuously and indiscriminately glasses of whisky, brandy, port, sherry and anything else in sight. I imagine the Court Chamberlain or some other dignitary must have despatched emissaries into the Bazaars to buy up every bottle they could find labelled with these names.
>
> While we sauntered from one table to another, we were beset by obsequious and magnificently dressed men bearing trays of glasses of indiscriminate fluids which they pressed upon us, mercilessly!
>
> The result, as the evening wore on and the obsequious men did not relax their efforts, was that language difficulties were almost entirely resolved and we all found ourselves from time to time, involved in fascinatingly interesting conversations with Syrians, Turks and others whom normally we would not have pretended to understand.
>
> It was a delightful party and ultimately, in the small hours, we left, not quite realizing that the continual intake of bazaar fluid had done to us!
>
> Fortunately, by that time the bazaar stalls had withdrawn into themselves and the people, animals and donkeys had, presumably, gone to sleep.
>
> We arrived at the aerodrome, wearily and rather muzzily to be greeted by a sleepy and bleary eyed orderly officer who handed the flight commander a chit and announced laconically, "all available aircraft to Aleppo at dawn"!
>
> The orderly officer had given necessary orders and the Bristols would be running at dawn; it remained to decide who would go and which would stay. This was decided in seconds and we all flopped out for about two hours of concentrated sleep.

While the convoluted system devised by the French in Lebanon would prove successful until very recently, the systems which the British developed in Palestine proved disastrous. Like the other British and French mandates, the British Mandate over Palestine was formally approved by the League of Nations in 1922. It would last until the tragedy of 1948. Its main priorities were laid out by the British government, which had stated that:

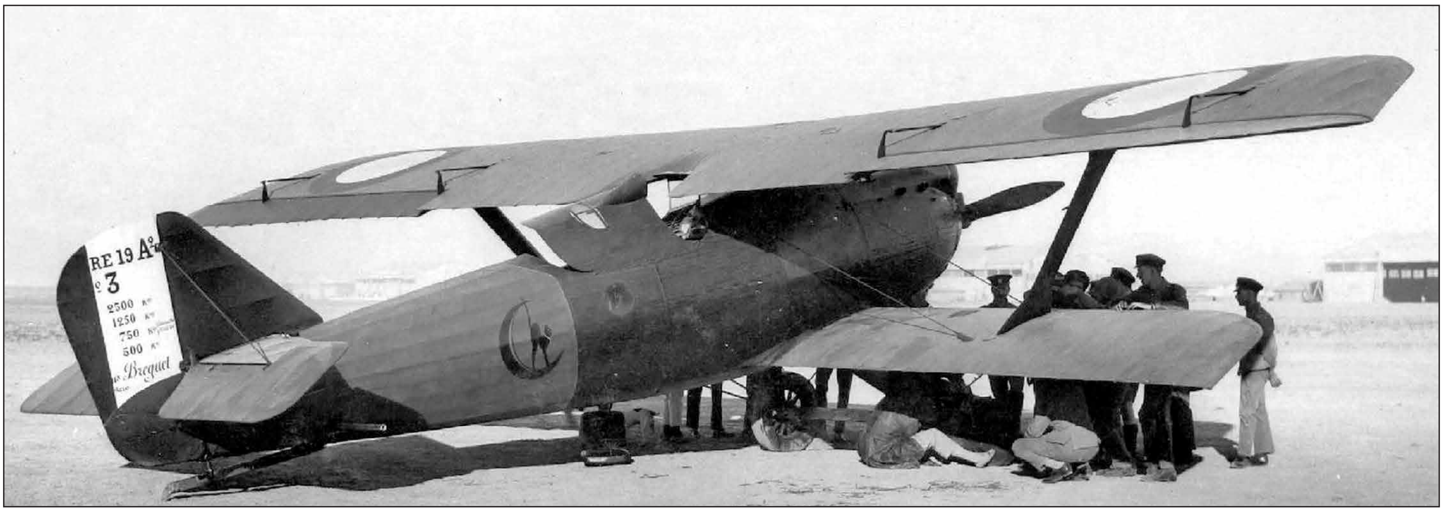
> Whereas the Principal Allied Powers have also agreed that the Mandatory [Great Britain] should be responsible for putting into effect the declaration made on 2nd November 1917 [the Balfour

> Declaration] by the Government of His Britannic Majesty, and adopted by the said Powers, in favour of the establishment in Palestine of a national home for the Jewish people, it being clearly understood that nothing should be done which might prejudice the civil and religious rights of existing non-Jewish communities in Palestine, or the rights and political status enjoyed by Jews in any other country.

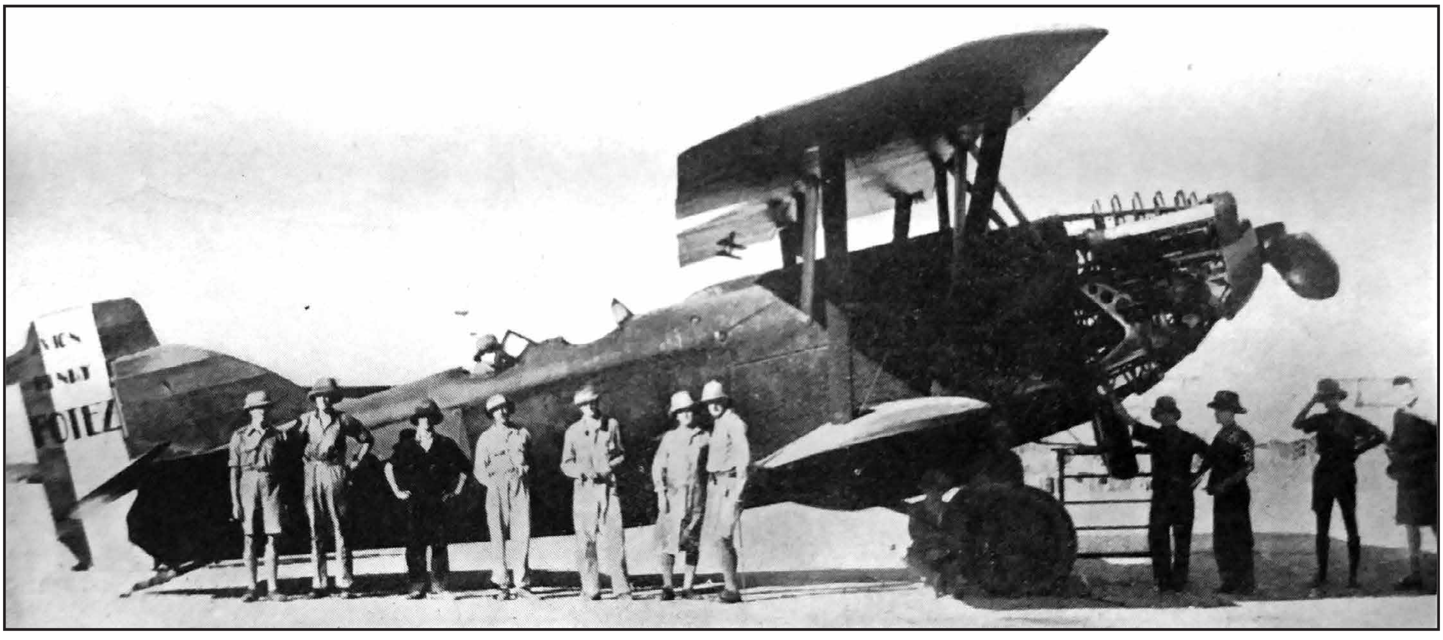
This was, in effect, a repeat of the main elements of the Balfour Declaration.

However, there were soon many who felt deeply concerned by the British Mandate. Many Arabs were shocked by what they saw as a British violation of agreements made prior to, and during the course of, the Arab Revolt of the First World War. Some Palestinians, and indeed many east of the River Jordan in what became Transjordan (later the Hashemite Kingdom of Jordan) wanted their country to be united with the rest of Greater Syria. As early as February 1919, a number of Muslim and Christian groups from Palestine, often known as the First Palestinian National Congress, urged this course of action and also restated their long-held opposition to Zionist Jewish colonisation of Palestine. Nevertheless, the early years of the British Mandate saw quite considerable Zionist immigration as well as a widespread and continuing purchase of land – often from absentee landowners – for Jewish settlements.

As is widely known, a census conducted by the British in 1922, showed that over three quarters of the population of Palestine were Muslims, one tenth Christians, just over a tenth Jews, with a few other very small confessional minorities. There had already been significant and occasionally violent Palestinian Arab protests at Zionist colonisation, most notably in the riots of April 1920. Seemingly caught unprepared by these events, it took the British four days to quell the disturbances. On one side the Arabs felt that they were being marginalised and betrayed. On the other the Zionist settlers felt that they could not count on unquestioning British support and so started to expand their own defence organisations. For their part, many British military personnel and civilian administrators felt that they were caught in the middle of other peoples' quarrels. Some sympathised with the Zionists, others with the Arabs, while yet others were tempted to quote Mercutio



The Breguet Br.19.A.2 in which the French aviators Georges Pelletier d'Oisy (a Great War fighter pilot with five confirmed victories) and Lucien Besin attempted to fly around the world in 1924 was photographed at RAF Hinaidi in Iraq. It would get as far as Shanghai before being written off in a crash on the golf course. The fuselage motif or badge seems to consist of a singing cat within a crescent moon. (Jarrige archive)



The Potez 28 was designed for long-distance record-breaking flights and only two were built. This 28 G.R. version, flown by Ludovic and Paul Arrachat, broke the world long-distance record by flying directly from Paris to Basra on 25-26 June 1926. The Arrachat brothers had covered 4,313 km in 26 hours and 30 minutes, and they might have gone further were it not for a broken fuel pipe. (Jarrige archive) in Shakespeare's Romeo and Juliet, saying "A plague o' both your houses". The latter feeling would grow as the years went by.

During the closing months of the Great War and for a short time afterwards, the region which became Transjordan was included in the British-run OETA (Occupied Enemy Territory Administration) East. The British then offered the southern district of Ma'an, plus Tabuk in the northern Hijaz, to the Hashemites, while retaining control of Karak, the Balqa (including what was then the little town of Amman) and Ajlun. In July 1920 the French expelled Faisal Ibn Husayn, the nominal King of Hashemite Syria, from Damascus (see Chapter 6). This also ended his already tenuous authority over the tribes of Transjordan whose chiefs had resisted central authority for centuries. Instead the tribal *shaykhs* expressed a preference for what they expected to be a distant British administration.

In fact, a series of meeting in Cairo and Jerusalem between Winston Churchill, the British Secretary of State for Air, and the Amir Abdullah Ibn Husayn, brother of Faisal Ibn Husayn the ex-King of Syria and future King of Iraq, resulted in Abdullah being offered an initially temporary administration over Transjordan. A few months later the area was incorporated within the British Mandated territory of Palestine, though explicitly excluded from any future "Jewish National Home" as envisaged by the Balfour Declaration. Abdullah's authority was made permanent and the Amirate of Transjordan became a British protectorate, which it remained until achieving independence as the Hashemite Kingdom of Transjordan in 1946 (the Hashemite Kingdom of Jordan since 1949). Along with the other conquered territories now occupied by British and French forces, the British Mandate over Transjordan had also been approved by the League of Nations in July 1922.

6

FRENCH AIR OPERATIONS OVER THE LEVANT

In the Levant, meanwhile, France was poised to greatly extend the influence it had enjoyed before the Great War, especially in what became Lebanon. Initially France not only took control of Lebanon and Syria, but briefly also Cilicia in what is now south-central Turkey.

French influence in Lebanon went back at least to 1860 but had, until now, been essentially financial and religious or cultural – not directly political. Although these territories had been seized from the Ottoman Empire by British and Arab forces, with a small-scale French participation along with a nominal Italian one, Britain and France had already agreed on a division of territory between themselves. This would largely be along the lines of the 1916 Sykes-Picot Agreement and would soon to be legitimised by the League of Nations in the form of mandates. What had been a French "sphere of influence" – almost a Franco-Ottoman "cultural condominium" – in the older area called Lebanon or Mount Lebanon, was to become, in practice if not in theory, part of the French Empire. Lebanon would also be greatly increased in size, changing its basic character in the process.

The situation in which the French found themselves in the Levant (Syria, Lebanon and for a while Cilicia) was very different to that in France's North African territories. The end of the First World War saw a small French military force already present in the area. It formed part of the General Headquarters Troops of Gen. Allenby's Egyptian Expeditionary Force and consisted of the 9th Battalion of the 2nd Algerian Tirailleurs, the Légion d'Orient (1st and 2nd Armenian Battalions, 23rd Syrian Company, and 3rd Battalion of the Légion d'Orient), all of whom were infantry. The cavalry consisted of two squadrons of the 1st Regiment of Spahis and two squadrons of the 4th Regiment Chasseurs d'Afrique.

As in French North Africa and Italian Libya, the French in Syria recruited local troops, usually known as *méharistes*. Here one of the ubiquitous French Potez 25TOEs, number 1510 of Escadrille EO 595, flies low over French Army méharistes near Palmyra around 1935. (ECPA archive)

However, the only community which appears to have welcomed the French were the Maronite Christians who were already "in communion" with the Catholic Papacy in Rome. They had long seen France as their most powerful protector. In contrast the other communities, both Muslim and non-Maronite Christian, correctly feared that France wanted to take control of Syria and Lebanon. This is, of course, what happened, initially as a result of the wartime Sykes-Picot Agreement between France and the United Kingdom, and latterly through the imposition of League of Nations Mandates.

Theoretically these mandated territories were neither colonies nor protectorates but were certainly more than mere spheres of influence. In everyday practical terms, and in the eyes of many of their inhabitants, they became part of the French Colonial Empire. In the eyes of most Europeans, and certainly of the French and British governments, the local inhabitants were thought to be at a sufficient level of social, economic and political development that, with guidance from "superior" western civilisations, they might soon be ready for independence. First, however, they had to be pacified and controlled – in other words conquered. Given France's condition of virtual exhaustion at the end of the Great War, it was decided that local troops should be recruited to support France's overstretched military manpower during the first critical years from 1918 to 1920.

These became the *Troupes Speciales du Levant*. Nevertheless, such troops would not include "technical arms" beyond a small number of machine gunners and artillerymen – certainly not airmen. Furthermore, such locally recruited Levantine forces were designed to reflect the cultural, religious and even linguistic diversity of the areas coming under French control. This in turn enabled the French to use the occasionally bitter historical rivalries between such communities to control the local troops which they themselves had raised, and also to control the area as a whole. It proved to be a classic and extremely successful example of divide and rule. This was especially so because the resistance, or various “rebellions”, which the French faced during the 1920s was itself based upon separate, sometimes minority, groups within Syria and to a lesser extent Lebanon.

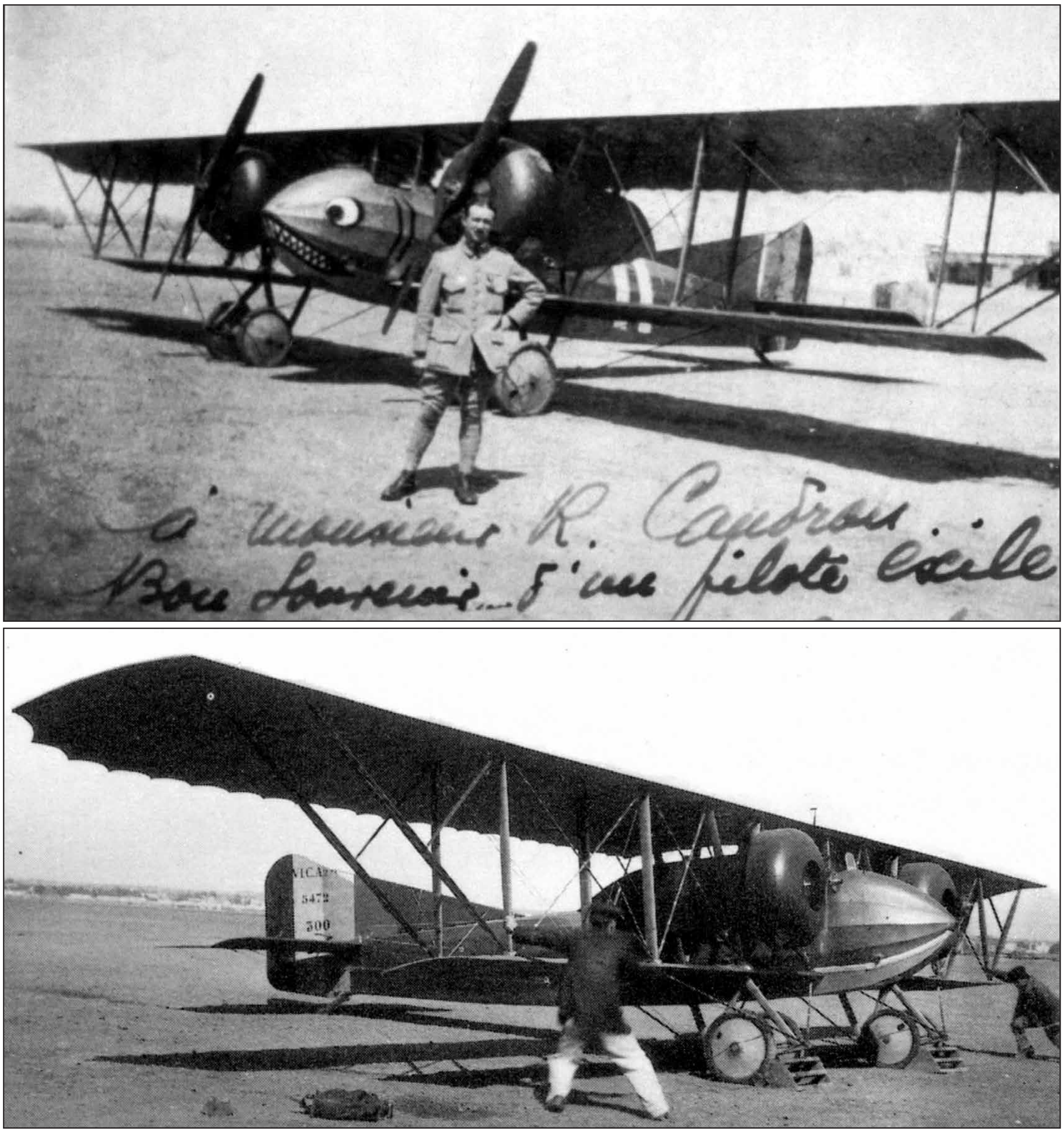
In the 1930s resistance to French domination in Syria came from the powerful Sunni Muslim landowning class and was political rather than military. As a result, from 1932 onwards recruitment for the Troupes Speciales changed as France built up a Syrian-Lebanese Army which remained firmly under French control. The proportions of ethnic or religious groups within these forces no longer reflected their proportion of the population within the countries as a whole. Instead, they evolved into an army dominated by whichever minorities the French most trusted. The bitter fruits of this policy by the French mandate authorities remain to this day.

Meanwhile a local officer corps was drawn from amongst the growing middle classes of both Lebanon and Syria and would be trained in a new local military academy. This officer corps would, it was hoped, become a counterbalance to the existing elites of tribal leaders and wealthy landowners. Eventually it did precisely that, especially in Syria, rising in revolt against the old landowners soon after the French left in 1946.

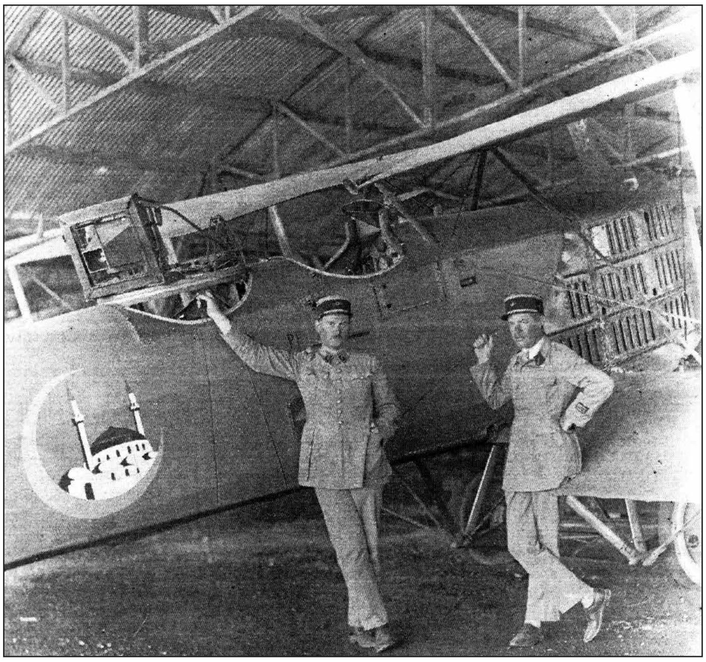
During the interwar years the French Service Aéronautique, and subsequently the Armée de l’Air, carried out “air policing” duties similar to those undertaken by the British RAF in neighbouring Iraq, Transjordan and Palestine. However, the first significant military confrontation which the French faced when they sought to impose their mandate would be against an ally – or more correctly an ally of their British allies – namely King Faisal Ibn Husayn Ibn Ali al-Hashemi, who had established himself in Damascus as the Ottomans left. When this crisis erupted in the summer of 1919, the British stood aside, and King Faisal was duly expelled. Thereafter the British neither opposed nor helped the consolidation of the French mandate, leaving a legacy of mistrust. In fact, during the 1920s and 1930s, some within the French mandate administration felt that the British were supporting Syrian and Lebanese nationalists in their efforts to undermine French authority. This too would bear bitter fruit during the Second World War.

The first French air squadron to be sent to Syria had already been preparing for action in the area before the sudden collapse of the Ottoman Army. This was Escadrille C 575 with its Caudron G.6s (see Volume Two), twin-engined reconnaissance machines based on the old G.4 and armed with one or two machine guns. Unfortunately, the Caudron G.6 proved to be unreliable while it also lacked either photographic or bombing capabilities. Escadrille C 575 had been summoned to Lebanon by François Georges Picot, France’s senior diplomat in the area. He had been appointed as Gen. Allenby’s principle political advisor for what would become the French Blue Zone, and subsequently its Mandate. As this stage, the Blue Zone covered a huge area including not only future Syria and Lebanon but a large part of southern Turkey including Cilicia.

Clearly the French would need air support as well as a much greater number of troops than they currently had in the eastern Mediterranean. They also wanted to end what was initially their almost total reliance on the British. On 16 November 1918 Gen. Hamelin, the commander of French forces in this area, sent Capt. Robert de Braquilanges to Beirut to identify suitable locations for aerodromes.



At the end of the First World War the only French Aéronautique Militaire unit in the Middle East was Escadrille C 575 with Caudron G6 reconnaissance bombers. It was preparing to move to Syria when the Ottoman Empire sought an armistice, so C 575 was based at Port Said where it was soon called upon to help the British control the disturbances which erupted in Egypt in 1919. (Musée Caudron)



A number of French squadrons in Syria and Lebanon adopted insignia which reflected their new homes, such as this flown by Cap. De Boysson (left) and Cap. De Castet (right) of the 4e Escadrille. The "badge" consists of an Ottoman-style mosque within an Islamic crescent. (Armée de l'Air photograph)

There were already several which had been established and used by Ottoman and German flying units during the First World War, so Capt. de Braquilanges' task was largely a matter of selecting which should continue to be used and therefore upgraded. Two days later twelve Caudron G.6s arrived in Lebanon from Port Said, but nothing seemed to be ready for them, so eight were sent back to Egypt in December. There they would remain, at Port Fu'ad on the eastern side of the Suez Canal, until January 1919.

Capt. de Braquilanges would serve in the Levant for almost ten years and played a major role in establishing French air power in the area. For the present however, he decided not to waste his time, despite Escadrille C 575 being effectively grounded, and so sent most of his pilots to the RAF aerodrome of Heliopolis outside Cairo for further training. Three others were held back to assist in the assembling and testing of the Caudrons. They included Lt. Bigot who now made the first G.6 flight in the Middle East, over Port Said. For his part, Capt. de Braquilanges returned to Lebanon to supervise the updating of Beirut's Bir Hassan aerodrome (north of the present-day international airport).

The Caudron G.6s were at last ready for operations in May 1919 but their first duties were in support of the British in Egypt, not supporting the French in Syria. The Egyptian Revolt was not a particularly violent affair but disturbances were widespread and the British were undoubtedly concerned (see Chapter 7). The Caudrons therefore undertook communications duties, flying British officers between Cairo and Port Said when the railway line was cut. Once calm had been restored, Escadrille C 575 flew its machines to Beirut, the first Caudron of Lt. Bigot and Adj. Schiavazzi arriving on 5 April after a refuelling stop at Ramlah in Palestine. Two machines were actually lost near Ramlah as a result of engine failures, though without injury, while the rest of the squadron finally gathered at Beirut on 23 April 1919.

Initially Escadrille C 575 had only six airworthy aeroplanes, but replacements arrived in June and the squadron could now support French troops. Their first missions were simply to demonstrate French power around Beirut, "showing the roundels" in the phraseology of the time. More serious duties, usually in the form of reconnaissance flights, followed as French troops "pacified" the mountains and opened up the road to Damascus during the summer and early autumn of 1919.

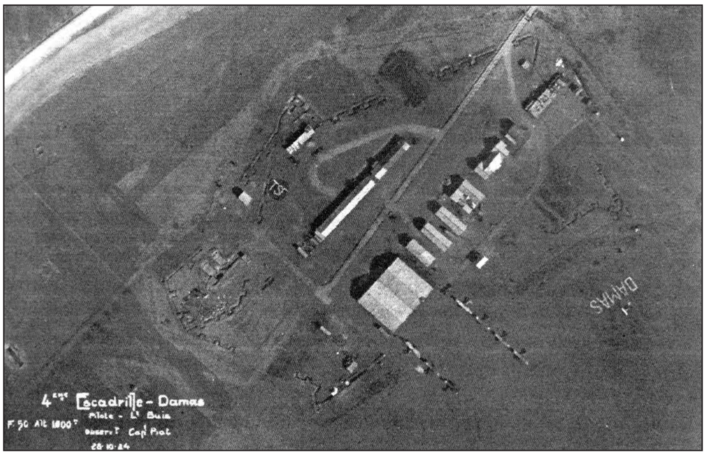
As the British started to withdraw from the Blue Zone in September, the French tried to take over control without violence. However, they had few troops in the Levant – in some cases only a fifth the number of British troops they replaced – and in any case several local populations had no wish to be placed under French rule. The result was widespread resistance and, in some areas, a full-scale revolt which stretched the forces available to Gen. Henri Gouraud (the French High Commissioner) to their limit. For example, it became clear that it was impossible for the French to control Cilicia, still less the mountains of what is now southern Turkey which had optimistically been declared a French zone of influence. The presence of French Navy Marines helped, but they were still nowhere near sufficient. Similarly, the Caudron G.6s of Escadrille C 575 could not provide support across such a vast and varied terrain. Nor did French aviation in the Levant yet have its own Staff. In fact, Capt. de Braquilanges found that all decisions had to go through the overburdened French Headquarters in Beirut.

Air reinforcements were requested but it took time for French forces in the Levant to receive proper air support. Meanwhile there was a serious confrontation between the French and Faisal al-Hashemi who had been installed in Damascus since October 1918. Following hasty elections, the first session of the Syrian Congress was held on 3 June 1919 and Hashim al-Atassi was chosen as its president. This inspired resistance to the French advance in many areas, including in the Beqa'a Valley of what is now eastern Lebanon, where the French had been gradually expanding their control. Tensions increased but as yet there was no major violence. Instead the French strengthened their forces and consolidated their hold over areas which they already dominated.

On 22 November 1919 Gen. Gouraud, the French High Commissioner, had arrived in Beirut along with Com. Victor Denain who had been appointed as the commander of French aviation in the Levant. Denain had considerable administrative experience during the Great War but in Beirut he found his first priority to be a looming confrontation with the Turks in Cilicia, rather than with the Arabs in Damascus. In addition to selecting new aerodromes, he sent Capt. René de Boysson to occupied Constantinople (Istanbul) to look for surplus French aeroplanes left over from French participation in the First World War's Salonika Campaign. Amongst other machines, de Boysson found Breguet XIVs and Spad XIIIs in reasonable condition, as well as other vital equipment. Even so, these could only be a stopgap measure.

The story of French involvement in Cilicia, or Little Armenia as it was sometimes called, lasted from December 1918 to October 1921 but almost immediately faced resistance from the non-Armenian majority. An Armenian National Union, which acted as an unofficial local government under French protection, also alienated the other communities in the region. Furthermore, supporters of Mustafa Kemal, founder of the modern Turkish Republic which arose from the ashes of the old Ottoman Empire, frequently came down from the mountains to clash with both Armenians and French.

Escadrille C 575 was involved in this crisis during the winter of 1919-20, mainly in communications work by carrying messages to isolated French outposts, many of which found themselves surrounded by unfriendly if not outright hostile local populations. Aerodromes at Qatma north of Aleppo and Adana in Cilicia served as staging posts, but the Caudron G.6 was found unsuitable for this work. Its crews had to operate over high and virtually uncharted



A vertical photograph of Damascus aerodrome taken on 28 October 1924 from an altitude of 1,000 metres. Two permanent hangers, several smaller buildings, a defensive system of trenches and a radio position can be seen, along with several aircraft. (Armée de l'Air photograph)

mountains, with a dangerous lack of spare parts and having to land on airfields where they were no shelters for their machines. Flights of six hours' duration and covering a distance of 1,000kms were not uncommon. The aeroplanes were frequently under fire and were often damaged. At the same time Escadrille C 575 was called upon to support French ground operations against supporters of the Amir Faisal much closer to Beirut, over Mount Lebanon, the Beqa'a Valley, Marj Ayun and over the Nusayri (Alawite) Mountains of Syria.

Next came a reorganisation of the French Service Aeronautique which saw C 575 redesignated as the 8th Escadrille. Meanwhile, January to May 1920 continued to see overstretched French troops and airmen operating in Cilicia and the coastal regions of Syria where they faced what was becoming guerrilla warfare. Furthermore, the Caudron G.6 reconnaissance machines were no longer fully operational, the last being replaced by Breguet XIV A2s early in February.

A newly arrived 6th Escadrille was based in Cilicia to support Gen. Dufieux from 17 January onwards, carrying on routine communications and resupply work, plus occasional reconnaissance, artillery spotting and the close support of French columns in essentially the same way as was being undertaken in Morocco. However, even the use of more potent machines made little difference to the dire situation. To the south, meanwhile, the reequipped 8th Escadrille continued observation and aerial police work over Lebanon and towards Mount Hermon where the frontiers of Syria, Lebanon and British governed Palestine met.

Although the war-surplus Breguets from Istanbul proved to be structurally weak, from early 1920 onwards French flying units in the Levant gradually became more effective. A point of no return was also fast approaching in the standoff between the French and Faisal Ibn Husayn Ibn Ali al-Hashemi. On 8 March 1920 Faisal was proclaimed King of Syria, claiming the entire area which France regarded as its zone of occupation and future mandate. The French did not react immediately, but continued to consolidate their position, not least in the development of properly equipped aerodromes. By April there were three main air bases, each supplied with fuel and ammunition stores; these being located outside Beirut, Adana and Killis (the latter two now in Turkey). There were also five auxiliary airfields under construction along the Mediterranean coast, located at Sidon, Trablus al-Sharqi (Eastern Tripoli, as distinct from Western Tripoli in Libya), Tartus, Lattakia and Alexandretta (the latter also now in Turkey, and called Iskenderun).

The Arab Kingdom of Syria failed to win international recognition and on 5 May the French mandate was confirmed at the San Remo Conference. Matters now rapidly came to a head. Three French bomber squadrons, the 201st, 202nd and 203rd Escadrilles equipped with Breguet B2s, arrived in Beirut on 22 June. A forward aerodrome was established near the Beirut to Damascus railway line at Ta'nayil in the Beqa'a valley. On 14 July 1920, Gen. Gouraud sent an ultimatum to Damascus. Between 15 and 23 July the newly arrived French squadrons, plus the existing 8th Reconnaissance Escadrille, were assembled, the first machines landing at Ta'nayil on the 20th after dropping propaganda leaflets over southern Syria, Damascus, Hims and Hama where King Faisal's supporters were still firmly in control.

This was followed by three days of photo-reconnaissance flights above the Anti-Lebanon range; now the frontier between Lebanon and Syria. Once in possession of information about enemy positions, Gen. Gouraud led his Third Levant Division towards Damascus on 24 July, meeting King Faisal's Arab Army at Khan Maysalun. The resulting French victory, also known as the Battle of Maysalun Pass, was made possible not least by close coordination between French troops on the ground and a substantial number of aeroplanes. In particular, the aircrews gave support to Gen. Gouraud's light infantry, spotted for his artillery, strafed and bombed the enemy, and hampered enemy movement along various minor mountain paths. This battle lasted about eight hours, during which each aircraft flew two or three sorties. All suffered damage from ground fire but only one was brought down when its radiator was hit. The pilot and observer were taken prisoner, only to be released a few days later after the French entered Damascus.

The Battle of Maysalun Pass was not only the first major battle fought by the French in the Levant; it was also the first time that the Hashemite Arab Army, many of whose members had fought against the Ottoman Turks during the Great War, faced a modern European army closely supported by a substantial number of modern aeroplanes. As such it would be a lesson long remembered, and from which Arab leaders learned valuable military and political lessons. Three months after the confrontation at Khan Maysalun, the French aerodrome in the Beqa'a would be transferred about 12kms east, from Ta'nayil to Rayaq which thereafter developed into a major air base for both the French Air Force and subsequently for the Lebanese Air Force. What remains unclear is whether or not the First World War Ottoman airfield usually known as Rayaq may itself have been located at Ta'nayil on the main road between Beirut and Damascus.

Success against the Hashemite Kingdom of Syria was followed by a return to the problems the French were still facing in northern Syria, Cilicia and southern Turkey. Here the arrival of the Breguet XIV B2 bombers and Spad XIIIs of the 55th, 56th and 59th Escadrilles in September gave a much needed boost to Gen. Goubeau's Fourth Division in their struggle against the resistance – or "rebels" – led by Ibrahim Hananu based in Aleppo, Idlib and Antioch (now Antakya).

The Breguets of the 53rd Escadrille were meanwhile committed to supporting French troops further east, in the Euphrates area from November 1920 to February 1921. Early operations went well for the French in this area, starting in October 1920 and culminated in the taking of Aintab (later renamed Gaziantep or "Heroic fighter Antep" by the Turkish Republic) in February. The aircraft supported French ground forces very effectively in what had become an established style of modern colonial warfare. A number of Breguet XIV A2s were also modified in Beirut for use as air ambulances, to evacuate wounded soldiers. French confidence was such that some squadrons were withdrawn from this area to carry out "showing the roundels" missions over barely subdued Alawi territory in the Nuyayri Mountains, inland from Syria's coast.

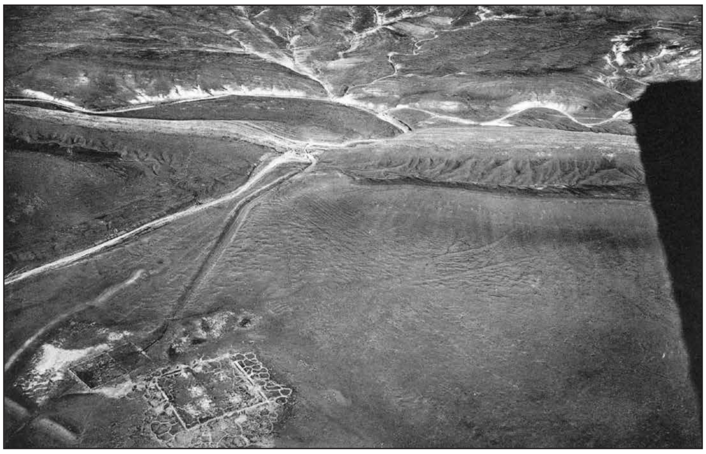
King Faisal swallowed his loss of the crown of Syria and accepted instead the crown of Iraq when it was offered to him by the British on 23 August 1921. Nevertheless, his brother, the Amir Abdullah Ibn Husayn, continued to oppose a French domination of Syria. His powerbase was in what is now Jordan, and on 1 April 1921 Abdullah would become the British sponsored Amir (Emir) and subsequently King of Transjordan. In the meantime, Abdullah Ibn Husayn made contact with Sultan Pasha al-Atrash, leader of the fiercely independent Druze population of the Jabal Druze highlands which lay north of a frontier between British and French zones of occupation.

Fearing that the Druze would request Abdullah's rule, Gen. Gouraud responded by sending an army column to this area. He also assembled 35 aeroplanes outside Damascus, ready in case of need and hoped that such a threat of air power would cow the Druze into submission without a fight. It was indeed a formidable force, the largest yet gathered in the French Levant, and was drawn from several squadrons. Six machines came from the 52nd Escadrille in Lattakia, seven from the 54th in Sidon, six each from the 53rd and 55th at Aleppo, four from the 56th at Adana, and four from the 58th at Mersin. Furthermore, they all arrived outside Damascus in just two days. Sultan al-Atrash was duly impressed and chose to submit to the French rather than risk a major aerial bombardment. To ensure that this actually happened, flights of 15-25 aeroplanes flew many patrols over southern Syria until Gen. Gouraud was satisfied that the Druze really had submitted, whereupon the aeroplanes began returning to their squadrons on 30 April. The operation had taken only two weeks.

In the north, it was becoming clear that the French position in Cilicia and southern Turkey could only be maintained by a major confrontation with the new Turkish Republic. At the same time the French faced difficulty extending their authority eastwards, along the River Euphrates towards British dominated Iraq. This was the southern edge of the Jazira region, part of ancient Mesopotamia, and Gen. Gouraud feared that low-level resistance might develop into a full-scale revolt against French authority. To forestall such an eventuality, on 10 September 1921 Gouraud ordered all available air units to be brought together at Muslimiyah. These were then formed into a bombing group, initially consisting the 53rd, 56th and 59th Escadrilles which had been withdrawn from Cilicia to Aleppo. They would soon be joined by elements of the 52nd, 54th and 57th Escadrilles. However, these units were still based some 400kms from the main centre of resistance at Dayr al-Zur, and consequently the bombing group failed to prevent the feared uprising. Furthermore, the distances involved meant that each Breguet XIV which carried bombs, had to be accompanied by another carrying additional fuel.

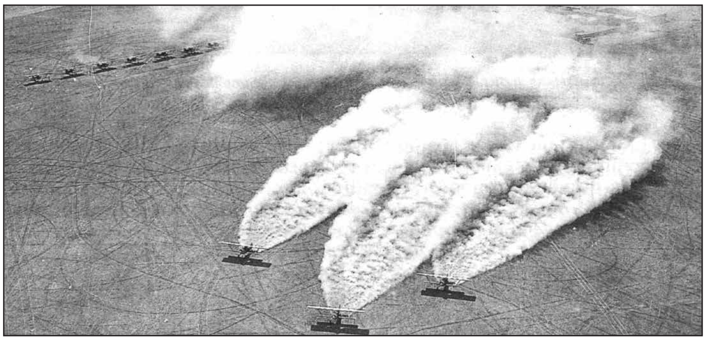
Operations against the "rebels" started on 10 September 1921 and the bombing campaign lasted ten days. It was a relatively modest affair, designed to keep Bedouin on the move but not to inflict many casualties. As a result the enemy were unable to concentrate in large numbers, yet in October a French column led by Gen. Debrieuvre still faced stiff resistance from local Arab tribes, so aircraft were again assembled at Muslimiyah to carry out a more damaging bombing campaign from 24 to 26 October.

Meanwhile the French government, being unwilling to commit to war with Turkey over Cilicia, decided to negotiate. On 20 October 1921 a full squadron of French Breguet 14A-2 aeroplanes, ten machines in total, were handed over the Turkish Air Force at Adana. The man who took charge of them was none other than Captain Fâzil who, having learned to fly in England before the Great War, had flown a captured French-built, British operated Maurice Farman MF 7, in Mesopotamia (Iraq) back in 1915 (see Volume 2). The following day the Treaty of Ankara with signed by France and the new Turkish Republic. The nominal frontier agreed between the victorious powers of the Great War and the defeated Ottoman Empire at the Treaty of Sèvres in 1920 was superseded. France relinquished its tenuous control over Cilicia, Aintab and

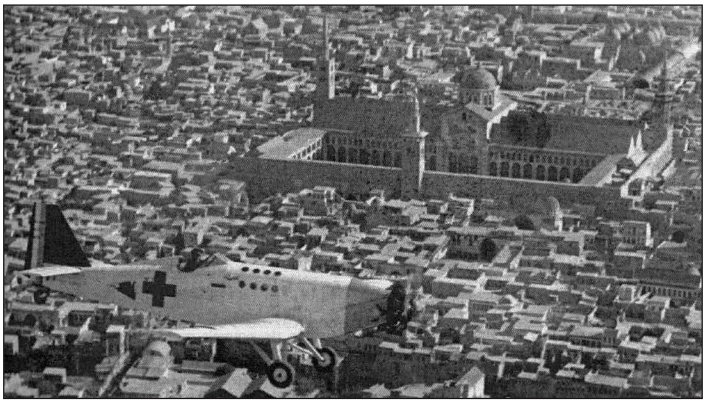


Fortified Khan al-Manqurah was an important "motel" for merchants during the early medieval Islamic Umayyad period. It also had a large water cistern immediately to the left, as seen in this photograph taken by Commandant de Boysson aboard a French Potez 25TOE for Père [Father] Poidebard around 1928. (Poidebard archive)

Père Antoine Poidebard with a large, long-distance camera mounted on the observer's gun-ring of a French Air Force Potez 25TOE in Syria around 1930. (Poidebard archive)



A Flight of three Potez 25TOE taking off from an aerodrome near Hassakah in eastern Syria, probably in 1933. Few photographs show the problems caused by dusty Middle Eastern airfields more clearly. (Jarrige archive)



A Bloch MB.81 of the Armée de l'Air's 3e Escadrille of the 39e Escadre du Levant, over the Umayyad Mosque in the Old City of Damascus, in the mid-1930s. This machine was used in the sanitaire or air ambulance role, in which a casualty or invalid was carried in an enclosed compartment with small round windows, in front of the pilot. (Armée de l'Air photograph)

other parts of what had been the old Ottoman wilayat or province of Aleppo, which were incorporated into the new Republic of Turkey. This agreement was eventually recognised by the international community through the Treaty of Lausanne on 24 July 1924, and as a result "historic Syria" lost the mixed Turkish, Armenian, Arab and Kurdish towns of Adana, Osmaniye, Marash (Maraş), Aintab, Killis, Urfa, Mardin, Nusaybin and Çizre.

One perhaps unexpected result of a general quietening of the situation in the French ruled Levant, was that it allowed the French Service Aeronatique (which would become the Armée de l'Air on 2 July 1934) to offer some of its aeroplanes, aircrew and support personnel in the service of archaeology. As early as 1920 Gen. Gouraud had envisaged French armed forces supporting archaeological work and even of protecting the main archaeological sites. In fact the Service Aeronautique would work in close collaboration with geographers as well as archaeologists, especially in the east of the country and in semi-desert or steppe regions.

Nevertheless, work soon focussed upon locating, identifying, photographing and surveying the ancient *Limes* or frontier zone of the Roman Empire. This not only meant looking for the ruins of forts far from the main centres of population, but also for the ancient roads which connected them. Unfortunately, the French suffered almost as badly as the Italians from a European preoccupation with the classical Graeco-Roman past. This led to the misidentification of some ruins as "Roman" merely because of their location and the fact that they had regular, usually rectangular, plans. It has taken modern archaeologists many decades to correct such errors and to identify several of these structures and other desert sites as being non-Roman, usually pre-early Islamic Arab sites.

The dominant figure in this field was Père Antoine Poidebard who had been put in charge of a geographical mission to "Asia" by Marshal Foch back in 1918. Having had experience in airborne observation while attached to the British RAF in Persia in 1918, Poidebard then spent the early years of the 1920s helping Armenian refugees who fled to Lebanon. Antoine Poidebard was now a Jesuit missionary, serving in the Université Saint-Joseph in Beirut. In 1924 he was attached to the 39th Regiment of the Service Aeronautique, looking for sources of water and ancient irrigation canals between the coastal mountains and the Iraqi frontier. Here he also tracked the migration routes of Bedouin tribes which were themselves a good indication of the movement of water and rain showers, as the nomads moved in pursuit of pasture for their animals.

It was during this work that Père Poidebard noticed the large number of *tels*, or small non-natural hills that were formed by centuries of human habitation, which existed in areas where there were no longer many permanent settlements. As he later explained, a look at a map which showed the locations of the main Assyrian or Roman cities, convinced him that what he had seen from the air was a network of ancient communications, fortified positions and the vestiges of long abandoned agriculture. Père Poidebard was also given access to reconnaissance photographs taken in the south of the country during the Druze Revolt, also known as the Great Syrian Revolt, of 1925-1927.

Having convinced his superiors, both religious and military, to support such work, Père Antoine Poidebard undertook a remarkable aerial survey of large parts of the Syrian Desert and the western zones of the Jazira (that part of Mesopotamia which lay within the Syrian mandate). This work began even while the Syrian Revolt was under way and would continue until 1933. Poidebard was supported by a loyal and equally enthusiastic group of French military pilots, observers, photographers, cartographers, mechanics, drivers, guides and others.

A variety of different sorts of photographic plates were used, according to conditions, while the sorties were flown either at dawn or dusk. It was at these times that the low angle of the sun caste the clearest shadows. Père Poidebard also discovered that, after rain, grasses and other plants would spring up at different rates according to what lay close beneath the surface of the ground. In so doing, they often indicating walls or other structures that were entirely invisible on the surface. The reconnaissance units of the 39th Escadre Aerienne (as this unit became by 1939) learned a great deal from their work for the Jesuit archaeologist, Père Poidebard. This in turn contributed much to what was still the "art" of taking and interpreting aerial reconnaissance photographs, especially from the versatile Potez 25TOE aeroplanes with which the escadrille was soon equipped.

7

BRITISH AIR OPERATIONS IN THE ARAB WORLD

Between the First and Second World Wars, a variety of Middle Eastern peoples found themselves under attack by the RAF as a consequence of the latter's role as aerial policemen for the British Empire. Most notable were the persistently "rebellious" Kurds of northern Iraq, though Arabs also occasionally found themselves beneath the bombs.

When the RAF was formed on 1 April 1918, it had incorporated both the Royal Flying Corps and the Royal Naval Air Service. Units specialising in operations over the sea, in support of the Royal Navy and in combatting enemy naval power, did not re-emerge as a distinct entity until 1924. Even then this new Fleet Air Arm was not placed under the direct control of the British Admiralty until the middle of 1939. Thus, at the end of the Great War, the newly created RAF included a number of squadrons which had considerable experience of warfare under Middle Eastern conditions, both over land and more particularly over desert terrain, and over Middle Eastern coastal waters.

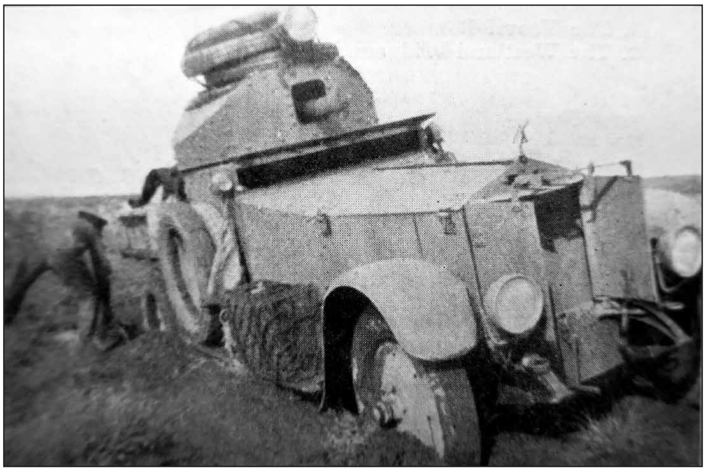
This would, for example, be reflected in the motto of No. 14 Sq., written in Arabic beneath the unit's badge and reading "I spread my wings and keep my promise". This motto was adopted in the early 1920s, during the squadron's service in Transjordan where the words had been suggested by the Hashemite Amir Abdullah Ibn Husayn. However, the motto also recalled No. 14's operations over Egypt, Palestine, Syria and the Hijaz during the Great War, after which the squadron had been recalled to the United Kingdom to be disbanded in February 1919. The British Air Ministry's decision to disband the unit proved premature and No. 14 would reappear in Palestine just under a year later, when No. 111 Squadron was renumbered as No.14. To further complicate matters, No. 111 would itself re-emerge as a home defence squadron in England in 1923.

For the British in the Middle East, the period immediately after the Armistice with the Ottoman Empire was initially much easier and quieter than for their French counterparts in Syria and Lebanon. Even in tumultuous Iraq ground operations ceased, except for taking control of Mosul in the north of country on 1 November 1918. This move would lead to a prolonged dispute with Turkey because it was undertaken after hostilities were supposed to have ceased under the terms of an armistice signed at Mudros two days earlier. Nevertheless, the British soon realised that they were sitting on a potential powder keg, and so it was decided that three RAF squadrons would stay in what was then still known as Mesopotamia. They would remain for a considerable time.

Of these squadrons, the R.E.8s of Nos. 30 and 63 Squadrons were already engaged in neighbouring Persia (Iran), with forward detachments at Qazvin in the northwest of the country and at Anzali on the Caspian coast. Here they took part in operations against Mirza Kuchik Khan, leader of a nationalist so-called Jangal or Jangli Movement in Gilan province which was supported by the newly established, but still embattled, Soviet Union. On the ground, these operations in notably difficult terrain were carried out by Persian Cossacks and British forces. The third RAF squadron based in Iraq at this time was No. 72 whose three previously scattered flights had been brought together in Baghdad from Samarra to the north and Persia to the east. Amongst its very varied equipment (De Havilland DH.4, Spad VII, Martinsyde G.100, Royal Aircraft Factory SE.5A and Bristol M.1C), the old but still effective Bristol M.1C monoplanes would be used for high speed communications.

No. 30 Sq. was disbanded in April 1919, and No. 72 in September, while No. 63 continued to have a detachment at Qazvin for several months before it also was disbanded in February 1920. The "Jangal Movement" in Gilan was in disarray and lost Soviet support, after which the British and Soviet governments came to an understanding. Mirza Kuchik Khan was overthrown as leader of the Janglis and eventually died of frostbite on 2 December 1921, after being abandoned in the mountains by his followers.

As already mentioned, a British refusal to allow an official Egyptian delegation to attend the Peace Conference following the First World War, led to great bitterness in Egypt. Here the Wafd Party under Sa'ad Zaghlul had emerged as the strongest political voice in the country. By calling for dignity and independence, it was a position the Wafd retained for three decades. For now, however, the Wafd's primary purpose was to present the Egyptian case to the British government in London. While the Wafd pursued this peaceful political path, feelings "on the Egyptian street" were growing angry. In contrast, the Egyptian Army remained remarkably calm – at least in the view of the British who included the Egyptian Army's own British officers. Their attitude was summed up in a patronising remark by one senior officer who described it as "an encouraging if modest reminder that all ideals had not perished in the confusion which overtook Egypt in the spring of 1919".



Men and vehicles of the RAF Armoured Car Companies played a role in Iraq, Transjordan and Palestine which was as important as that of Italian armoured cars in Libya. They also faced similar difficulties of terrain and climate, as when this Rolls Royce Armoured Car (probably a 1920 Pattern Mk. 1) got bogged down in Mesopotamian mud in 1926. The multiple spare tyres, on the roof of the turret and on the sides of the vehicle, were no help in such a situation. (Author's collection)

In the aftermath of the largely British victory over the Ottoman Empire in the Great War, British confidence soared. Similarly, in the light of an urgent need for massive cuts in defence expenditure, it was widely believed that the RAF could "police the Empire" from the air. This ambitious idea was enthusiastically advocated by the current Secretary for Air, Winston Churchill, and was supported by the Chief of the Air Staff, Sir Hugh Trenchard. More specifically, in Churchill's view, the RAF's policing role in the Middle East could be carried out by a combination of aeroplanes and armoured cars, both of which would form part of the RAF. Thus No. 1 Armoured Car Company RAF was formed in 1921, specifically for operations in Iraq, and was soon followed by Nos. 2 and 3 Armoured Car Companies. All were equipped with Rolls Royce vehicles of a type developed during the First World War. The basic design dated back to 1914, but improved 1920 Pattern, 1924 Pattern and Indian Pattern Rolls Royce Armoured Cars were introduced during the interwar years. In Egypt and Iraq some of these vehicles were also given a new Fordson chassis and became known as Fordson Armoured Cars.

The League of Nations Mandate over Mesopotamia, or Iraq as it would come to be known, rapidly proved to be a troublesome acquisition for the British. In this part of the Middle East, the overwhelming majority of the population were no happier to be placed under "infidel" British rule than the Syrians were to find themselves ruled by the "infidel" French. For the British, however, Iraq was probably more important than Syria was to France, as it lay next to the vital Persian oil fields and would itself become a major source of oil. Furthermore, Iraq, Transjordan and Palestine became important links in a network of British Imperial communications.

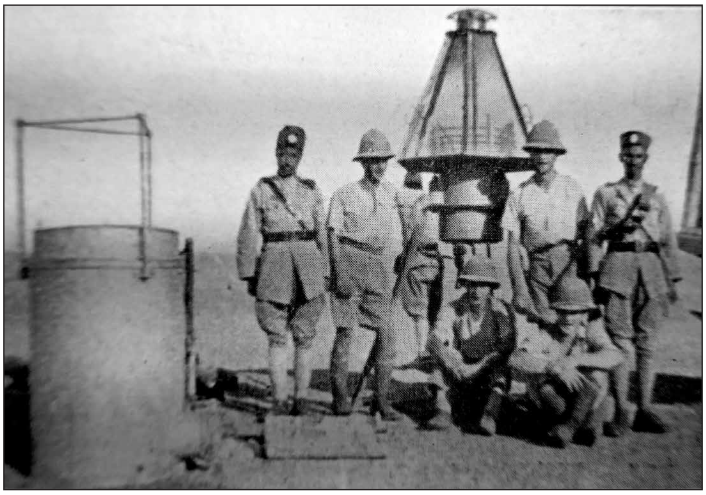
Meanwhile many of Iraq's frontiers were as yet unmarked, often disputed and ran through geographically as well as politically hostile territory. To the east Persia (Iran) took time to emerge from the chaos caused by the First World War and was still resentful of high-handed British interference. To the north the emerging Turkish Republic continued for many years to claim the city of Mosul and its province. To the east lay Syria, where the French faced a long fight before their authority was firmly established. In fact, British dominated Transjordan was the only untroubled neighbour apart from the tiny Amirate of Kuwait on Iraq's most southerly frontier. Between Transjordan and Kuwait lay the wide open, frequently violated and for many years unrecognised frontier with what became Saudi Arabia.

Even before the League of Nations granted the Iraqi mandate to Britain, demonstrations and rioting broke out against British occupation in May 1920. Starting in Baghdad, where it was supported by many ex-officers from the disbanded Ottoman Army, the trouble soon spread to Arab tribes, both Sunni and Shi'a. Many of the Kurds of northern Iraq similarly rose up in pursuit of their own independence and as a result this crisis came to be known as the Iraqi Revolt or Great Iraqi Revolution.

For a while it looked as if the British might actually be driven out of Mesopotamia altogether and there were somewhat panicked plans for British troops to make a fighting withdrawal to the Persian Gulf. However, this did not happen and by August 1920 British forces had largely stabilised the situation. They then counterattacked, with a British offensive being spearheaded by the RAF whose pilots and air-gunners had been given special training in the pursuit and gunning down of horsemen, as well as identifying and then strafing individual snipers hiding amongst palm trees. Nevertheless, this near defeat had been a huge humiliation for the British Empire and was followed by widespread, often brutal reprisals.

One common tactic was for British troops to surround an insurgent village during the night, ensuring that no one could escape. At dawn, the RAF would appear and bomb the settlement, sometimes completely demolishing it. Another brutally effective tactic was to drop high explosive on a village, followed by cans of petrol to accelerate any fires caused by the bombs. A refinement of this form of aerial attack saw numerous small bombs being dropped in order to break the roofs of houses, followed by numerous small incendiaries which could get into the roof timbers and house interiors thus exposed. It was a precursor to the systems used on a massive scale during the Second World War, reaching its culmination in the firestorms which engulfed several German cities during the latter part of the conflict.

RAF operations in Iraq during the early 1920s resulted in improvements in training as well as bomb-aiming equipment and the use of larger bombs. Local Arab and Kurdish insurgents, who had come to the conclusion that hostile aeroplanes were usually more frightening than dangerous, now saw their villages practically obliterated. In several cases they also witnessed a tribe's womenfolk and children being mown down alongside its fighting men. Sometimes these events can truly be described as massacres. A case in point was in 1921, when a large number of non-combatants sought refuge on an island surrounded by marsh, only to find themselves trapped. They then provided what RAF sources described as "a good target" for aerial gunfire. On this occasion even the normally sanguine Winston Churchill was horrified.

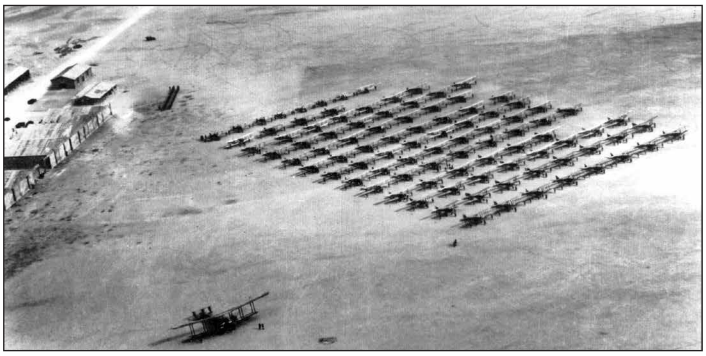


While the French erected signposts across the Sahara, the British erected lighthouses to mark the main desert route between Amman and Baghdad. This example was close to Fallujah in western Iraq in 1926, and the local troops who protected it expected prompt assistance from RAF armoured cars in case of trouble. (Author's collection)

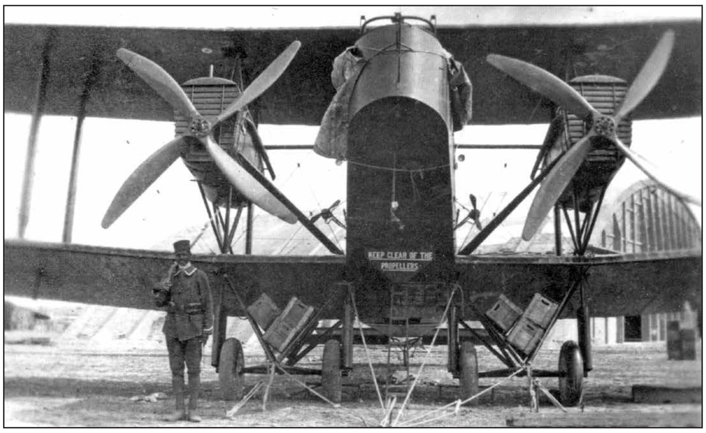
Although the Iraqi revolt was largely crushed by British military power by October 1920, trouble flared again in 1921 and the last embers were only extinguished the following year, by which time more than 2,000 British and Imperial personnel had been killed. The British response had been prompt, brutal and ruthless. Winston Churchill, the British Minister of War as well as Secretary of State for Air, had been advocating the use of tear-gas and lethal gas for some time, stating in an internal memo dated 25 May 1919 (confidential at the time but subsequently released):

> I do not understand this squeamishness about the use of gas … It is sheer affectation to lacerate a man with the poisonous fragments of a bursting shell and to boggle at making his eyes water by means of lachrymatory gas [tear gas]. I am strongly in favour of using poisoned gas against uncivilized tribes. The moral effect should be so good that the loss of life should be reduced to a minimum. It is not necessary to use only the most deadly gasses: gasses can be used which cause great inconvenience and would spread a lively terror and yet would leave no serious permanent effect on most of those affected.

Perhaps fortunately for the reputation of the United Kingdom, Churchill's enthusiasm for chemical weapons in the context of colonial warfare would be resisted. Gen. (later Air Marshal) John Maitland Salmond, the Air Officer Commanding British troops in Mesopotamia/Iraq, had declared his opposition to the use of poison gas "in any form", even as a means of "blocking the passes". The latter instance probably envisaged the spreading of mustard gas which was persistent rather than volatile and would be particularly dangerous to tribal warriors wearing light footwear or no shoes at all. Others who opposed the use of poison gas against colonial foes included senior civil servants and military men in the British War Office, one of whom pointed out the simple fact that a high explosive bomb was "more formidable" to life and property than a "gas bomb". Generally speaking, military men with experience of real warfare appears to have been more opposed to the use of such air-delivered chemical weapons than were certain British politicians. Furthermore, the British had no experience of using the latter, nor indeed in manufacturing effective aerial gas bombs to be dropped from aeroplanes.



The RAF's Palestine Brigade lined up at Heliopolis aerodrome on what was then the edge of Cairo, ready to be reviewed by Gen. Allenby on 23 December 1918. They include a solitary Handley Page 0/400 heavy bomber (serial number C9681) which is closest to the camera. (Cross & Cockade International)



A Handley Page 0/400 bomber of No. 58 Sq. RAF at Heliopolis, guarded by what might be a locally recruited or African sentry, probably in 1919. (EAF Museum)

Churchill actually gave Gen. Haldane, Head of the British Army in Mesopotamia, permission to use poison gas, but no such aerial bombs were available, though experiments on a porcelain bomb were currently being undertaken in England. Nor, for many months, was there an RAF representative in the British Chemical Warfare Department. Several British government memos bemoaned the fact that there was a lack of knowledge of the RAF's real requirements in this respect, and although one or two designs had been approved it remained doubtful whether they would be effective.

Nevertheless, a comment by a senior figure in one memo dated 24 May 1919 stated that: "there are some 9.45 inch converted Trench Howitzer Gas Bombs which could be lifted by Handley Page machines, and as three squadrons of these machines are being sent to Egypt as a reserve for operations there and in Palestine or India, these bombs, after further investigation ..., might still be of some value if sent out". A further note stated that "mustard gas would probably be the best filling" while some six weeks later another stated that "H.S. is the code name for mustard gas".

British experiments dropping chemical weapons from a Handley Page 0/400 heavy bomber have remained largely unknown. Trials of various possible aerial gas bombs had actually been carried out at the British Royal Engineers Experimental Station at Porton Down in Wiltshire on 21 October 1918, a few weeks before the end of the First World War, using converted 9.45-inch trench howitzer shell casings. After the Armistice, Porton Down had been reduced to a skeleton staff but in 1919 the British government reconsidered this decision, set up a committee to consider the future use of chemical warfare and by 1920 Porton Down's future as the United Kingdom's main military scientific centre was assured.

In January 1919, a 550lb steel bomb was sent to Porton Down to be tested as a possible vehicle for delivering poison gas, though months would pass before any results were reported. The same was true of the 200lb porcelain bomb which was sent to Porton in February. A government note dated 11 June 1919 still stated that the only available gas bomb, the converted 9.45-inch trench howitzer or mortar shell, was too heavy for all aircraft available except the Handley Page 0/400, and that there was a clear need for small bombs which could carried by an R.E.8, Bristol Fighter or DH.9, as currently used in "the east", and by single-seat aircraft in future.

Five days later one of the most detailed and revealing of the documents in this extraordinary correspondence (now made public at the British National Archives in London) was a memorandum from Brig. Gen. Popham, the Director General of Scientific Research (D.G.S.R.). It is worth quoting at length:

> The best gas to use appears to be as follows –
>
> (a) Lachrymatory.
>
> (b) Phosgene.
>
> Mustard gas is likely to make a casualty of an affected person for some six months and will foul the ground for a long period so that people stepping on rocks or stone on which the gas has burst will become casualties.
>
> I also understand that natives of India of Africa would be liable to be killed off by Mustard gas more than European would be.

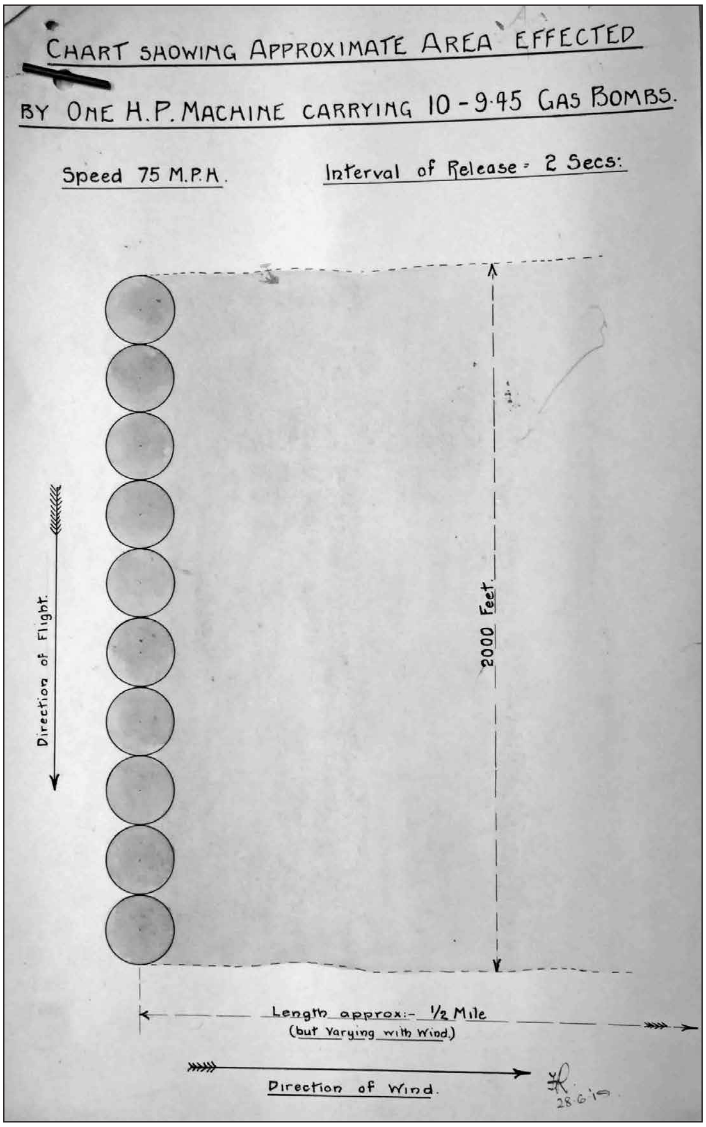
Brig. Gen. Popham continued:

> I attach a chart showing the approximate area affected by ten 9.45 gas bombs dropped at 2 seconds intervals. This would be a load from a Handley Page 0/400. The chart assumes that the first bomb is dropped in approximately the correct position with reference to the objective and that the machine keeps on a straight course for 20 seconds during which the bombs are dropped in succession. I am having a calculation made bringing in the 50 per cent zone but I don't attach much value to these figures, as the accuracy of bombing varies so enormously with the conditions on the ground and in the air.

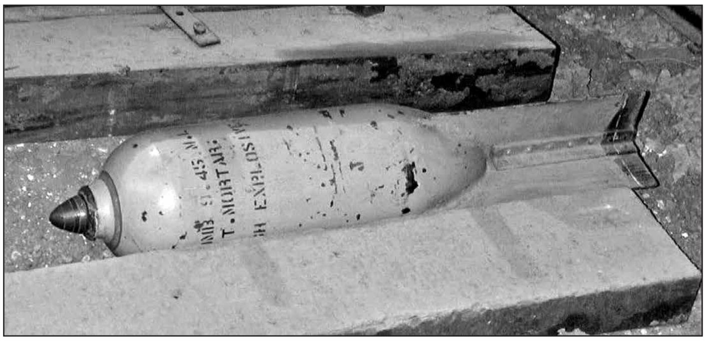
A plan from the Chemical Warfare Department at the War Office, showing the pattern of bombing and the distribution of gas during these tests, was attached Popham's memo.

On 20 June 1919, Lt. Col. H.E.R. Braine, a War Office liaison officer, followed up by writing that, "I have spoken to the Armament Section of the directorate of Research, and am informed that they could supply 300 bombs to be used from the Handley Page machine in about six weeks; and that this type of bomb can be filled with lachrymatory, semi-killing, or totally killing filling". Nevertheless, there remained a serious lack of personnel trained to handle such weapons, especially amongst British forces in the Middle East.

There were also experiments in other unconventional air-launched weapons such as giant stink bombs, stun bombs, missiles to poison water sources or to glide onto a target from a safe distance. Most of the British documents concerning chemical weapons were not marked "Secret". However, one dated 14 October 1919, and coming from the Air Ministry in the Strand, central London, was stamped "Very Secret". This discussed the appointment of a special RAF officer who would "study the question of Chemical Warfare from the point of view of the Royal Air Force". It included imaginative ideas which might today sound fanciful, such as releasing light gas against pursuing aeroplanes to jam their machine guns and force enemy aviators to carry respirators. The only one of these ideas which proved effective was the laying of smoke screens



The chart drawn by the British Army's Chemical Warfare Department at Porton Down on 16 June 1919 to illustrate its testing of aerial gas warfare. Gas bombs were dropped from a Handley Page 0/400 in anticipation of their possible use against Kurdish dissidents in north-eastern Mesopotamia, now northern Iraq. (National Archives, Doc. 1919 AIR 2-122, London; author's photograph)



A significant number of 9.45-inch Trench Mortar Bombs of this type were modified by the British Chemical Warfare Department in 1919, for use as a poison gas bomb dropped by aircraft. (Imperial War Museum, Duxford)

from the air, though some others would resurface in modern times, most obviously in the form of distance launched stand-off weapons.

Churchill was nevertheless supported in his opinion by some senior Air Force figures; one RAF memo arguing that, "It is essential that we should be able to use gas bombs against savages, etc., if we want to". Winston Churchill was not alone in advocating the dropping of gas bombs, providing that the targets were non-European and supposedly "primitive" peoples. Meanwhile there

Air-Commodore Robert Brooke-Popham in front of a Handley Page 0/400 (serial number D4436) at Landing Ground (LG) 4 at al-Jid, west of Rutba in the westernmost corner of Iraq. This was during the test flights which resulted in the establishment of a defined air route between Cairo and Baghdad in 1931. (Private collection)

was a widespread belief that "natives" would be more likely than Europeans to be killed by mustard gas because they were thought to be physically weaker.

Fortunately, the British Government as a whole remained horrified at the idea of using chemical weapons against subjects of the Empire, and although tear gas was almost certainly made available to the RAF, the British denied that it was used in the form of bombs dropped from aeroplanes. Though the accusations remain, all available evidence indicates that they are incorrect. In fact, the work of the RAF's small number of Bristol F.2Bs and DH.9s, operating from a handful of inadequately equipped aerodromes widely spaced across Iraq and without recourse to chemical weapons, became the stuff of legend within the United Kingdom. An additional squadron was also sent from Egypt while significant efforts were put into extending and improving RAF facilities on the ground. Major air bases were constructed near oil installations at Kirkuk and Mosul, at Hinaidi near Baghdad, Shaibah near Basra and on the plateau above Habbaniya (known as RAF Dhibban until 1938) west of Baghdad. Numerous smaller landing grounds were also marked out around Iraq, though they sometimes seemed to be more like map references than actual facilities.

It was during this crisis that the idea of "air policing" really took off, largely because the British Army insisted that it would need far greater numbers of troops than were currently available to crush the Iraqi Revolt. Not only would an enlarged army in Iraq be very expensive at a time when the United Kingdom was only starting to repay the vast debts incurred during the First World War, but significant enlargement so soon after the demobilisation which followed the War, was regarded as politically unacceptable.

Back in January and February 1920, Winston Churchill and Hugh Trenchard discussed the idea of "air policing" as a cheaper alternative. But first the Iraqi Revolt had to be dealt with, along with facing down revived Turkish claims to the far north of the country. The RAF had already achieved remarkable success in British Somaliland where it helped defeat an uprising, so the RAF's Mesopotamian Group was raised to the status of a Wing in January 1921. On 13 February 1921 Winston Churchill, a keen advocate of the use of air power to control the Empire, became British Colonial Secretary, a position he would hold until 19 October 1922. In August, the Amir Faisal Ibn Husayn also became King of the newly created Kingdom of Iraq under the British Mandate.

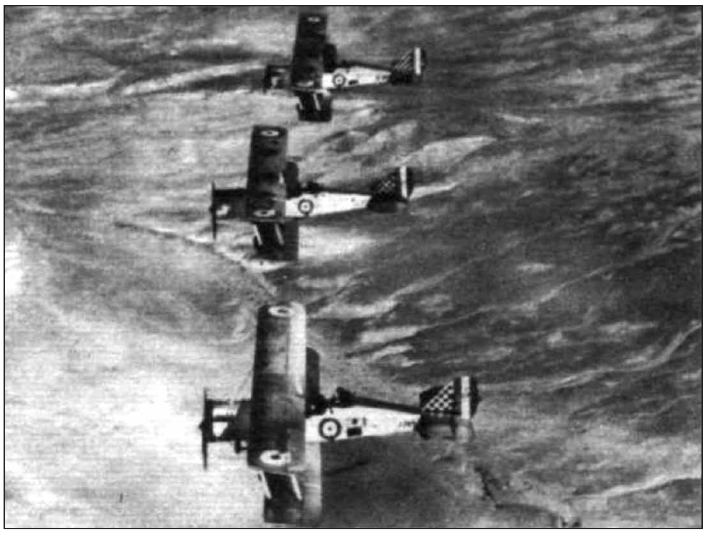
Churchill was now convinced that a few strongly defended air bases, sited at suitable locations across Iraq, would allow the RAF to operate in all parts of the country. In so doing, the RAF would be able to maintain British control without need for long and vulnerable overland lines of communications and supply. Some troops would still be required, but the entire system would be significantly cheaper than the available alternatives. On the other hand, the RAF could not protect Iraq from external attack on its own. However, that would not be the RAF's purpose and in any case no significant external threat was envisaged. The resulting policy led to some of the earliest experiments in Air Policing in which aeroplanes played the major role, supplemented by small forces on the ground. The system also came to be known as Air Control but was sometimes more accurately, and more honesty, simply called "police bombing".

Even in the early days, there were those in the senior ranks of the other services, in the civil service and amongst politicians, who opposed the idea. For example, Field Marshal Henry Wilson, Chief of the British Army's General Staff from 1918 to 1922, denounced the Air Control system "for killing women and children". However, the aristocratic and highly conservative Field Marshal Wilson also had a profound mistrust of the newly established Royal Air Force which he believed to be manned by left wing technicians rather than old-school gentlemanly officers.

At the start of October 1922 the Mesopotamian Group was absorbed into a broader Iraq Command. Furthermore, all British forces in the country were now placed under the RAF instead of the Army, as had previously been the case. Initially dismissed by the majority of senior British Army officers as another of Winston Churchill's "madcap ideas", it proved to be successful and is still regarded as the best example of Air Control in the history of military aviation. The RAF's headquarters were initially in the old British residency, later upgraded to an embassy, in Baghdad. The first day of October 1922, also saw the arrival of 1,100 RAF officers and airmen, all of whom were at first accommodated in Baghdad. In addition to maintaining peace throughout Iraq, this force had to protect vital pipelines from oilfields near Basra in southern Iraq to Jaffa on the Mediterranean coast of Palestine. Thereafter, eight squadrons would be based at Baghdad West, Hinaidi, Mosul and Shaibah. These were Nos. 1, 6, 8, 30, 45, 55, 70 and 84 equipped with Sopwith Snipes and De Havilland DH.9As, both of which designs dated from the First World War.

The RAF inevitably suffered losses during the Iraqi Revolt, though not on the scale of the ground troops nor, of course, anything comparable to those endured by the insurgents and their families. Seven aircrew were wounded and ten killed, mostly as a result of groundfire. Large numbers of aeroplanes were damaged to a greater or lesser extent, and 57 had to be returned to salvage. Eleven were shot down. Meanwhile stories of the mistreatment of downed airmen were widespread, including a myth that captured aircrew would be castrated by infuriated Arab women. This never apparently happened, but the Arabic leaflets issued to pilots and other aircrew, offering £500 for a man's safe return to the British authorities, were popularly known as "gooly chits". Again, the available evidence contains no proof that these papers were effective or needed. On at least one occasion the reward was spurned by a local shaykh who, after rescuing a downed crew who were being beaten up by their captors, handed the shaken RAF men over without further ado.

Ten Sopwith Snipes of No. 1 Sq. RAF over Kadhimain close to the Iraqi capital of Baghdad in the mid-1920s. The squadron was based at RAF Hinaidi from 1921 to 1926. Behind them are the twin gilded domes of the Kadhimiya Mosque, a very important focus of Shi'a Muslim pilgrimage and devotion. (Fl. Lt. Sharpe photograph)



No. 45 Sq. RAF received out-dated De Havilland DH.9As in 1927. As a unit which spent formative interwar years based in Egypt, No. 45's badge included a winged camel and the squadron became known as the Flying Camels. A Flight of these aeroplanes, with their distinctive chequered tail markings, are here reputedly flying over the Sudan in 1927. (via De Havilland Museum)

Then there was the case of Flying Officers Herbet and Garidner who were forced to make an emergency landing after bombing Arab insurgents on 14 July 1920. They were then attacked by local women who, instead of going for their private parts, merely tried to throttle them. Herbet and Garidner were rescued by a local leader who not only sent them back to their squadron with their personal belongings, but even allowed the men to keep their weapons.

The RAF was similarly called upon to assist Royal Navy gunboats which got into difficulties on Iraq's rivers. Shallow draught gunboats played an important role during the Iraqi Revolt, including those of the Fly-class, which had been constructed during the First World War. They were initially called Small China Gunboats to disguise their real function and were made in what might be described as kit form in the United Kingdom. They were then shipped to Abadan in southern Persia (Iran) where these ships were assembled. One such Fly-class gunboat was HMS *Greenfly* which had been launched in September 1915 and normally carried a crew of 22 men. She ran aground at Khidr on the Euphrates and, being unable to re-float herself, was besieged by insurgents for almost two months. British aeroplanes attempted to drop food and other supplies for the crew, but one DH.9A (serial number F2838) was shot down on 22 September 1920.

One account of this event stated that the crew of Flg. Off. H.C.E. Bockett-Pugh and Flg. Off. I.D.R. MacDonald of No. 84 Sq. were killed at they tried to escape from their wrecked machine. Another stated that Flt. Off. Ian MacDonald, an air ace credited with 20 victories during the Great War while flying the DH5 and S.E.5a, was seen to wade ashore before being taken prisoner. He later died, or more probably was executed, at Dangatora. The flights were therefore stopped and, according to a report in the leading British newspaper, *The Times*, 17 crew from HMS *Greenfly* surrendered to the insurgents. Eventually a British ground column reached the stranded gunboat but found only the body of one officer. The rest of the crew were more fortunate than Flg. Off. MacDonald and his colleague, being released as a gesture of good faith by Arab tribal leaders in the Suq al-Shayukh area, who wanted to submit to British authority.

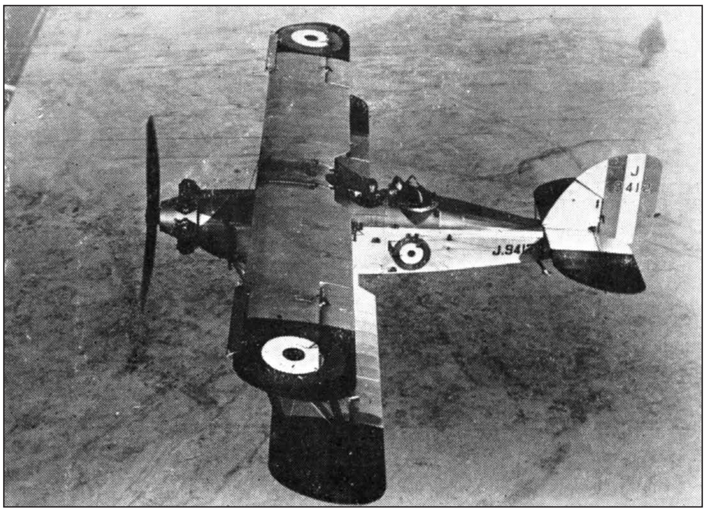
Yet other sources seem to confuse this drama with earlier RAF losses on 17 July 1920, when a DH.9A was shot down, supposedly into the River Tigris 32kms south-west of Samarra, while trying to drop supplies to the crew of a previously downed Bristol F.2b Fighter. It may have been the men from this DH.9A who were shot while trying to wade ashore from their downed aeroplane. However, the account makes little sense as the Tigris flows south-east of Samarra, not south-west, though the edge of the artificial Lake Tharthar (created in 1956) is almost exactly 32kms south-west of Samarra. What had originally been the Tharthar Depression did contain run-off water during the winter and early spring, but this seems unlikely to have reached within 32kms of Samarra in the heat of July 1920.

HMS *Firefly* was another Fly-class gunboat. She had been captured by the Ottoman Army on 1 December 1915, at the disastrous Battle of Ctesiphon. Retaken by the British in February 1917, *Firefly* was then sunk in shallow water by insurgent gunfire at Kufa on the River Euphrates on 14 May 1924. RAF aeroplanes tried to drop supplies to *Firefly*'s stranded crew, but two were shot down by the insurgents, whereupon such sorties were again stopped.

By now there was a new Air Officer Commanding in Iraq, Air Vice Marshal John Maitland Salmond, who had served on the Western Front during the First World War. Salmond was put in charge of Iraqi operations in 1922 and was highly popular with his men. He also reportedly flew a maroon coloured DH.9A and on a number of occasions led sorties from the front. Unlike his immediate predecessors, John Salmond was given adequate resources, and with eight squadrons he was able to keep a lid on the volatile affairs of Iraq. Four of these RAF squadrons were equipped with DH.9A bombers, two with Vickers Vernon heavy transports, one with Snipes and one with Bristol Fighters.

Over the next ten years the RAF showed that it could deal with the challenges posed by Iraq. These ranged from tribal unrest to more significant uprisings against the authority of both the British and King Faisal, plus Turkish incursion in the north and raids by Saudi Arabian *ikhwan* war-bands in the south.

A Westland Wapiti of No. 30 Sq. RAF over Mosul in Iraq, around 1930. Immediately behind the aeroplane is the famous 12th century Bent Minaret of the Mosque of Nur al-Din Zangi, which was destroyed by Islamic State fanatics in 2017. (Fl. Lt. Sharpe photograph)


A Westland Wapiti of No. 30 Sq. RAF flying over Iraq, showing the red painted wingtips and tail plane designed to make it easier to find an aeroplane if the pilot made a forced landing in a remote location. No. 30 Sq. used Wapitis from 1929 to 1935 and, like several RAF units based in the Arab World for long periods, it adopted a suitable badge – in its case a palm tree. (Fl. Lt. Sharpe photograph)

Meanwhile Kurdish dissents became a major problem for Iraq and would remain so. Matters came to a head early in February 1923 when the British blamed the Kurdish leader Shaikh Mahmud Barzanji for stirring up anti-British activity. Having returned from exile in India, Mahmud Barzanji was, in fact, recognised as King of Kurdistan by some Kurdish tribes and clans from 1922 to 1924. In response the RAF dropped delayed action bombs near the Kurdish capital of Sulaymaniyah in order to intimidate "King Mahmud" and his followers. Then, on 17 May, British forces occupied the town while Mahmud Barzanji fled to neighbouring Persia (Iran).

This was followed by British imperial and Iraqi forces taking Rawanduz and expelling Turkish troops who had entered the area. Some of the latter withdrew into eastern Turkey while many fled across the Persian frontier. In addition to bombing and strafing these so-called "rebels", RAF aeroplanes carried 280 soldiers of the Indian Army's 14th Sikh Regiment from the Kurdish village of Kingirban to the town of Kirkuk in what was claimed to be the first major military air transport operation in history. In reality it was the first such British operation, eventually transporting about 500 Sikh soldiers aboard Vickers Vernon transports from Nos. 45 and 70 Sqs. An Italian airlift, almost a year earlier in March 1922 should probably be considered the first such operation (see Chapter 4).

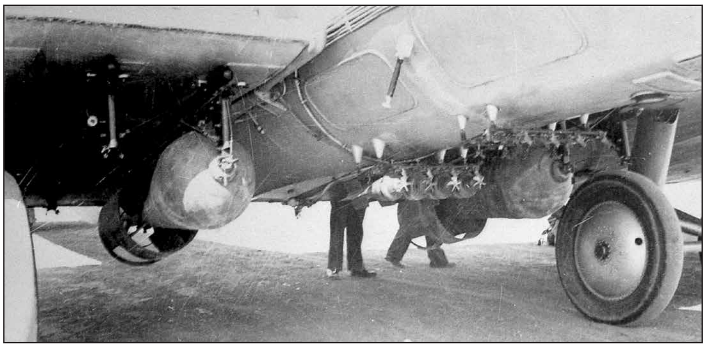
The Vernons of No. 45 Sq were commanded by Arthur Harris, the future commander of Bomber Command in the Second World War, who claimed to have invented the RAF's first real "heavy bomber" in the process. This was done by adding improvised bomb racks beneath the wings of Vernons and later Valentias and making holes in their fuselage floors to serve as bomb aiming positions. Another less effective experiment was the fitting of large loudspeakers to a Vickers Vernon which flew over suspected dissident villages, booming out a warning of imminent bombing attacks and urging the inhabitants to surrender. This or perhaps a later apparatus was prepared and fitted by the men of the RAF's Main Wireless Station at Hinaidi, the control centre for what was described as "point-to-point work" in Iraq and a major link in the chain of command. The officer commanding this wireless unit early in 1933 was Flt. Lt. P.J.R. King and a broadcast was made by an unnamed Kurdish member of the Iraqi Police. What remains unclear, however, is whether the policemen broadcast to his fellow Kurds by radio via loudspeakers in the aeroplane, or was himself on board a Vickers Vernon, Victoria or Valentia.

Next, the winter of 1923-1924 saw RAF aircraft busy in the south-west of the country where, in December and January, they bombed Wahabi ikhwan raiders from the Najd region of Arabia. These ikhwan were trying to make the local Bedouin tribes accept their own fundamentalist form of Islam, along with Saudi domination. Though the fearsome and largely uncontrolled ikhwan were already proving a problem for Abd al-Aziz Ibn Sau'd, the founder of what became the Kingdom of Saudi Arabia, they remained his most dedicated fighters. One of the important leaders in this part of Arabia was Faisal al-Duwaish of the Mutair tribe. At the same time Britain did not want to risk a war with Ibn Sa'ud, and so the RAF were ordered not to cross a barely defined border between Iraq and Sa'udi territory, even in hot pursuit of bloodthirsty ikhwan raiding parties. Instead largely ineffective defensive measures included building airstrips closer to the frontier, dropping warning leaflets on nomadic tribes who migrated to-and-fro across this frontier, and ordering Iraqi tribes to leave the frontier zone altogether.

More effective was a new Southern Desert Camel Corps formed under John Bagot Glubb, the future Glubb Pasha of Jordanian Arab Legion fame. But even they could not stop Ikhwan raids altogether, and after one particularly serious incursion in February 1928, the RAF was permitted to strike back across the frontier. Preliminary to this, British aeroplanes fought three days of running battles with the raiders, during which one crewman was killed by groundfire. He was, in fact, the only fatality suffered by the RAF during some ten years of combat against Wahabi fanatics in this part of Iraq.

For the first time – at least officially – the RAF was allowed to strike back and a few days later a substantial force of armoured cars supported by fuel tankers crossed the frontier to build an airstrip in what was now Sa'udi territory. Twelve DH.9As then arrived, followed by three Vickers Victoria transports, which had been converted into heavy bombers, while the new desert airfield was protected by the armoured cars. The British authorities in Iraq had, in fact, decided to attack Faisal al-Duwaish's major settlement at al-Lisafa which had been beyond the range of aeroplanes using the RAF's existing aerodromes in Iraq.

At dawn on 24 February 1928 the DH.9As took to the air and headed for the fortress and fortified village of al-Lisafa. Nearby was a substantial encampment. All these targets were attacked with 20lb and 500lb bombs while the Victorias also scattered small anti-personnel bombs. Aiming the latter was rudimentary, consisting of an observer in the front of the aeroplane pulling on strings attached to the arms of men further back inside the fuselage. The latter then tossed bombs out of the windows when they felt a tug on their arm while other crewmen screwed detonators into the grenade-like bomblets before handing them to the "tossers".



The bomb racks beneath an RAF Vickers Type 264 Valentia, as they appeared in the mid-1930s. Though originally designed primarily as a cargo and troop transport, the Valentia could be fitted with racks for large bombs beneath its wings and smaller bombs beneath its fuselage. The Type 264 first entered RAF service with No. 70 Sq. based at Hinaidi in Iraq in 1934. (Woodroffe archive)

A large bomb falling from a Vickers Type 264 Valentia, photographed from the bomb-aimer's position in the mid-1930s. (Woodroffe archive)

The ruins of Faisal al-Duwaish's fort can still be seen on the north-western edge of the modern village of al-Lusafa, but back in 1928 the ikhwan leader decided to call off his raiders for a while. Al-Duwaish then joined other Wahabi leaders in attacking Kuwait; a particularly vicious assault being launched in January 1929. The raiders withdrew before the RAF could react. Fortunately for both the Kuwaitis and the British authorities in Iraq, Abd al-Aziz al-Sa'ud was finally losing patience with the ikhwan zealots. His army crushingly defeated them in August 1929, after which Faisal al-Duwaish fled to Kuwait in order to surrender. Here he insisted on handing his sword to the most senior RAF officer present, acknowledging that it had been the British airmen who had broken his power. On the other side, the upper echelons of the British Army baulked at the idea of a medal being awarded to the RAF for a campaign which had cost them so little blood, though eventually such a campaign medal was awarded to the men involved.

In the aftermath of the First World War and the British occupation of Iraq, the conquerors were keen to recruit reliable local troops, and the country's Assyrian Christian minority seemed to offer a suitable pool of military manpower. The Assyrians adhered to several different Christian denominations: a separate Syrian or Syriac Church, a Syrian Orthodox Church and a Chaldean Catholic Church. Some had already fought for the British during the final stages of the Great War's Mesopotamian campaign and they continued to serve in what was then known as the Arab Scouts for the rest of 1918. The following year the name of this formation was changed, initially to the Arab Militia, then to the Iraq Levies, then again to the Arab and Kurdish Levies. Finally, it was divided into two units: a mobile strike force (the Levy) and a smaller police force (the Gendarmerie). The Levies were, however, under the authority of the British Colonial Office until 1928 when they were transferred to the RAF. It was at this point that their headquarters was moved from Baquba to the major RAF base at Hinaidi, and subsequently to the main RAF base in Iraq at Dhibban (Habbaniya).

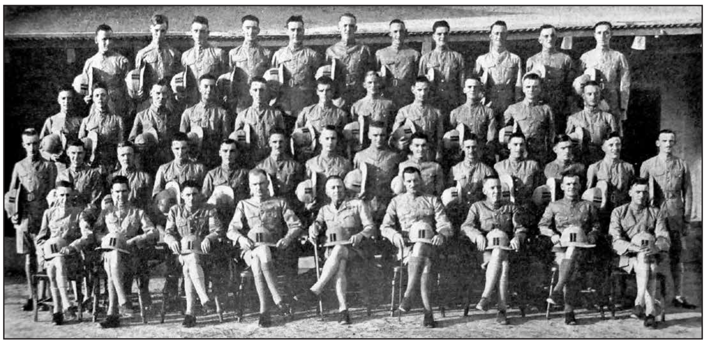
By 1923 Christian Assyrians formed approximately half the Iraqi Levies, rising to a considerable majority by 1932, with the rest of the troops being Kurds or Shi'a Arabs, plus a smaller number of Armenians and Mandeans. The latter were adherents of a dualist faith, believing that the forces of good and evil, light and dark, are almost equally balanced in the universe, while honouring figures from both the Old and New Testaments. The Levies also included Turcomans, but Sunni Arabs were notably absent.

Deep mistrust between various confessional communities in Iraq was almost inevitably reflected within the otherwise generally pro-British and reliable Levies. The Assyrian communities' overt loyalty to the British occupiers similarly made them suspect amongst many of their fellow Iraqis. Most British sources praised these Christian troops but seemingly not all in the RAF agreed. According to Michael Shaw, in his history of No. 1 Squadron RAF, the Levies could be seen as "a particularly bloodthirsty bunch of Assyrian mercenaries recruited because their loyalty could be relied upon by way of their pockets".

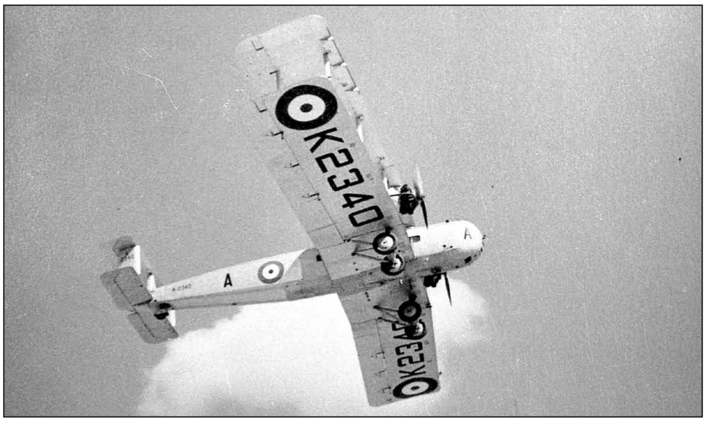
In 1924, a dispute between some Assyrian Levies and Muslims living in the mixed town of Kirkuk resulting in the Christian soldiers firing live rounds at a Muslim crowd and, in the words of a report at the time, of "running riot". The British mandate authorities decided that the only way to restore order was to use British troops, so Air Vice-Marshal J.F.A. Higgins sent two platoons from the 1st Battalion the Royal Inniskilling Fusiliers by air to Kirkuk. However, they were not sufficient and on 5 May the Fusiliers had to be reinforced by two additional infantry platoons, again flown in by the RAF. Meanwhile No. 30 Sq. RAF made a detailed reconnaissance of the Kirkuk district.

In circumstances like these the work of RAF special service officers was crucial. As Air Chief Marshal Sir Alfred Earle, then a junior RAF pilot in Iraq, explained in a later interview preserved in the archives of the Imperial War Museum in London:

> We had, in normal times, in a number of villages round the country chaps called special service officers who were Arab speakers who lived there in normal times. And they'd collect a lot of information. They'd get to know the area well. And of course after the operations these chaps would talk quite happily. So we had a pretty good idea through that network of the special service officers.
>
> When asked about the men involved, Earle said:
>
> They were ordinary, mostly, Air Force officers … and they were funny chaps. They used to like living out in the native towns and villages. Thoroughly enjoyed it. I think they got well paid. Their expenses weren't very high. And they did a very good job … I think some of us thought that they must be a little bit mad or a little bit more broke than we were to take the job on.



The personnel of the RAF's Main Wireless Station at Hinaidi. This unit made the "broadcasting apparatus" from which a Vickers Victoria boomed out a message to Kurdish dissidents in 1932, urging them to lay down their arms. Sitting in the middle of the front row in Flt. Lt. P.J.R. King, commanding officer. (Private collection)



The RAF's Vickers 264 Valentias were a common sight in many British dominated territories in the Middle East and India. This example (serial number K2340) probably belonged to No. 70 Sq. Having been built as a Victoria Mk. V, it was later rebuilt as a Valentia. (Woodroffe archive)

On the other hand, in the opinion of the future Air Chief Marshal, their work of these special service officers was not generally dangerous.

The year 1924 saw an anti-British and anti-Arab uprising amongst the Kurds of northern Iraq, mainly around Sulaymaniyah and again led by Shaikh Mahmud Barzanjithe self-styled King of Kurdistan. British aircrews found operations in Kurdish mountains extremely difficult as the terrain made accurate bombing virtually impossible. In fact, the primitive aiming devices currently available were often abandoned in favour of the pilot's own mental calculations. As one pilot, S.J. Carr, put it: "You relied on judgement of speed, angle of descent and drift. It was rather like trying to spear fish in a barrel". By the time these operations came to a temporary end, 19 aeroplanes had been lost as a result of mechanical failures, ground fire or simply the weather, though no crew were killed.

Sometimes trouble with the Kurds erupted so suddenly that RAF personnel were in danger of being captured while supposedly on a rest and recuperation vacation in Kurdish territory. This nearly happened to the air-gunner Spencer Ernest William Viles, who subsequently described a narrow escape:

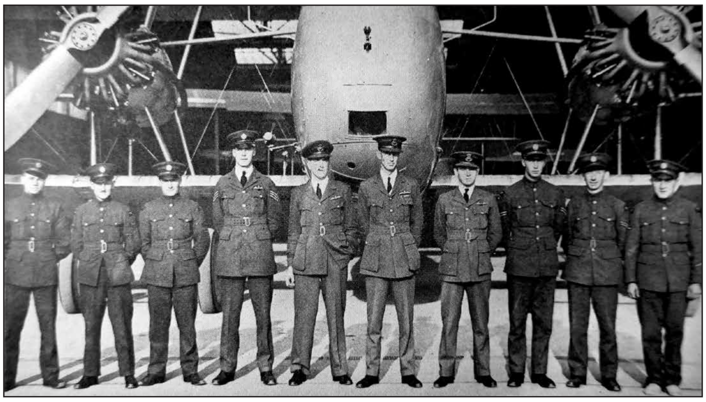
> We had gone up to our rest camp called Ser Ahmadiyya [probably the picturesque fortified hilltop town of al-Amadiyah] ...where you'd have to walk the rest, right up through a valley and climbing all the time and it was, oh it was terrible climbing up those hills, it was real hard work and it took about four hours to do that three miles. And we'd been there about eight days and a signal came through that we were to return to base immediately. And we'd already heard things, you know how the bush telegraph

> goes in the services? Well there's the same goes you know with the Kurds up there because the Kurds were talking about it. And this falconer I used to know, the one who'd taken me round the villages, he said one day, 'Sir, there's trouble in the border line between the Kurds and the Iraqis'. I said, 'What kind of trouble? 'And he said, 'There's war, we're fighting' … Well the next day we were told to break up camp straight away and go down to the transport point, get in our transport and get back to the airstrip where the [Vickers] Victorias would be waiting to take us back to Hinaidi.
>
> Well we had to go right through the Kurdish country there to the border line, which is all hills and forestry, and we found ourselves going through one valley when all of a sudden there were shots going all over the place, and we didn't know whether they were being aimed at us or not. And then when we got around the corner there was a big Iraqi detachment there waiting to get us out and to tell us what was happening ... and round that corner we were safe. But we didn't think the Iraqis or the Kurds would fire on us, they were firing across the valley at each other, but we were in the middle of it anyway … And we called in at Mosul and refuelled and back to base. And we got back to base quite safe and no one hurt.

One of the ways in which air power and psychological warfare came together in Iraq, along with other British mandated or imperial territories during the 1920s, was when the British constructed mock-up villages then "invited" local leaders to witness their spectacular destruction from the air. This was considered to be so successful that something similar was introduced into the highly popular Hendon Air Displays, held annually on the northern edge of London in order to impress the British public with the RAF's prowess. Such destruction of wood and canvas "native villages" was at the end of the show, and in 1922 the village in question included a mosque, minaret and desert fort. The latter was "garrisoned" by the "Wottnott Tribe" consisting of RAF personnel "blacked up" with boot polish on their faces, who fled in all directions as a bomber squadron obliterated the edifice. By the late 1930s attitudes had changed a little, and the target at the close of the 1937 Hendon Air Show represented a European port.

Meanwhile in Iraq, psychological warfare was being used in an attempt to cow "rebel" Kurds and Arabs without inflicting excessive casualties. Amongst those trained in such techniques was the RAF pilot, Alfred Earle. When asked what such operations normally involved, he replied:

> Well, mainly supporting and working with the Iraq Army. They had columns out chasing the rebels and we used to keep virtually an aeroplane over them all day while they were moving, make sure they didn't get ambushed. We used to do our own reconnaissance looking for the rebels. If we found them in the open and we could see that they were armed we were allowed to attack them. If they were in a village, and they usually were, if we saw them and they nipped into a village very quickly because they knew you were not allowed to attack them, it was a case of dropping leaflets warning them that in an hour you were going to bomb the village, they'd all better get out quick. Then after twenty-five minutes you'd drop a smoke bomb, that was a thirty-five minute warning, then you'd have a go. Twenty-five pound bombs mostly were used. We used hundred-pounders occasionally but mostly twenty-five pounders, they didn't do much damage to a mud hut.



The crews of two Vickers Victorias ready to fly to Iraq for trials of their Bristol Pegasus powered machines in 1933. Four pilots at the centre are (left to right) Sgt. J. Cattell, Flt. Lt. I. McL. Cameron, Sq. Ldr. W.M. Yool and Flg. Off. H.Y. Humphreys. (Author's collection)

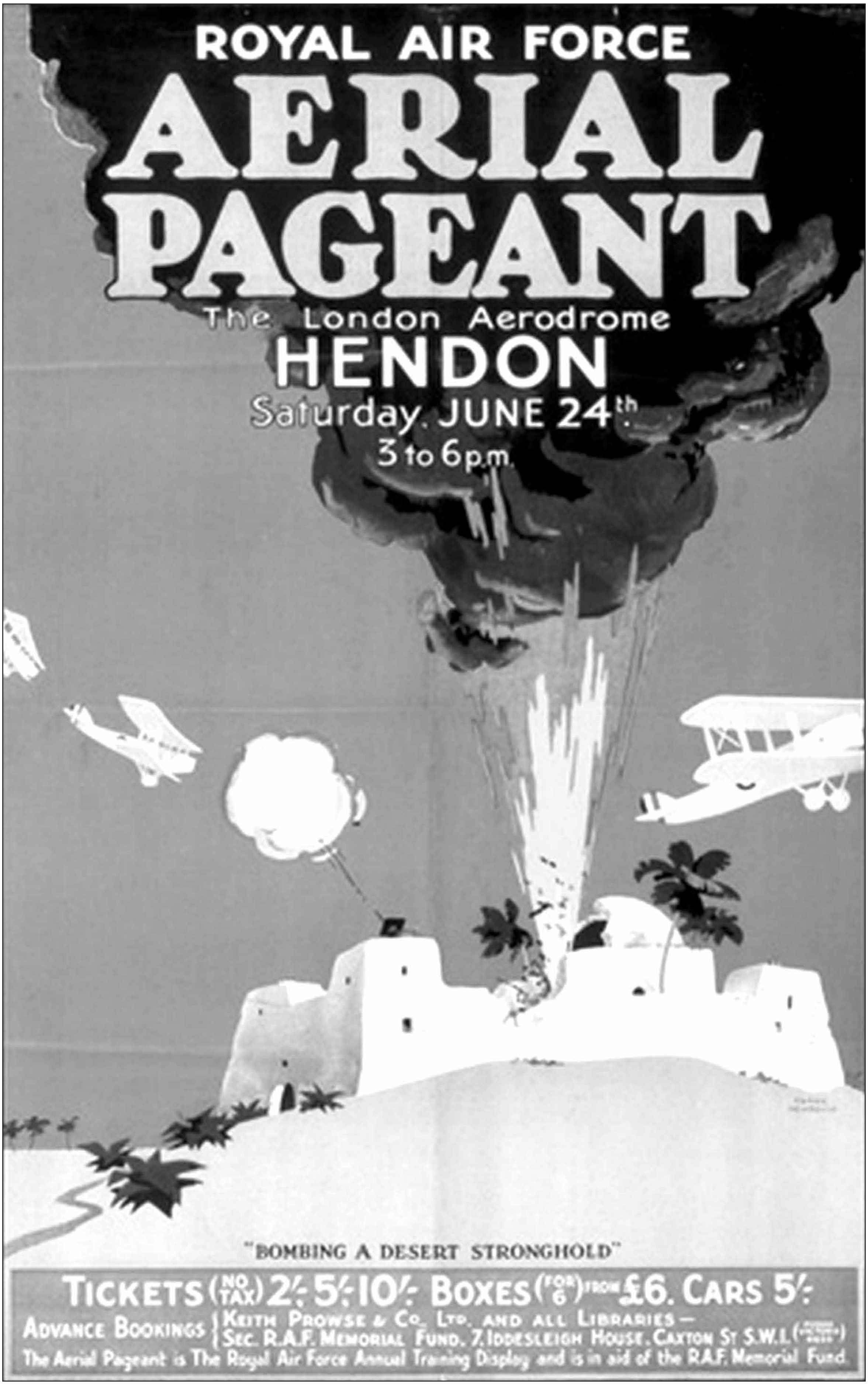
For a view from the rear cockpit during such operations, we need only turn to the transcribed interview with Spencer Ernest William Viles. He also makes it clear that some of the ordnance used by the RAF in Iraq in the early 1930s was in a dubious condition:

> We would fly from Hinaidi up to a place called Sulaymaniah [where there was a forward airstrip] … And first of all we'd drop pamphlets warning them that if they didn't get out of these villages, or any part we wanted them out of, we would bomb them. And we gave them forty-eight hours' notice on that. And our political officers up there, whoever they may be, I don't know who they were, but information came through that they [the Kurdish "rebels"] weren't moving and they were still entrenched where they were, so we took out 112 pound bombs, 1917 stuff. And some of them were quite dangerous when you got to the bombing site because you'd find there were cracks in them and they were exuding [explosives from inside the bomb casing], and they were taken away and exploded independently. And we chose the one we wanted that was good and still had the rings secure to hang on the bomb racks. And having bombed them up we would take off from Sulaymaniah and go to the designated place or village and blow it up if we could. And not everyone was a good bomb aimer, the bomb sights weren't so good as I've mentioned before …

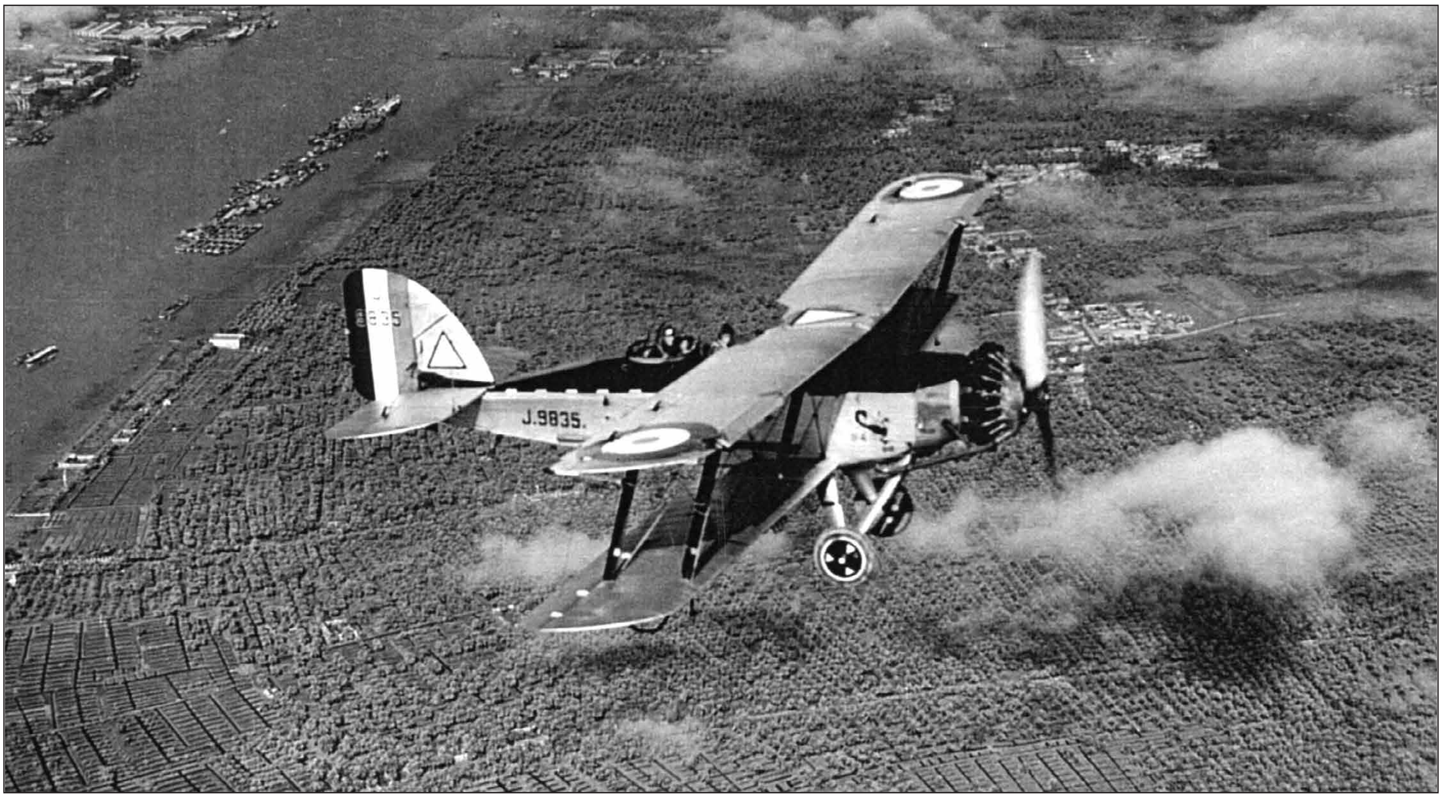
When asked what part he himself played as an air gunner in such operations, Viles explained: "Well, if we saw any cattle around that we thought belonged to them we just went down low and we just gunned them down".

There were, of course, other dangers for the RAF in the Middle East, not least that of getting lost in the huge desert and semi-desert region between the British mandated territories of Iraq and Transjordan. This could draw in French personal based in Syria to the north, as well as local Arab guides. Once again Alfred Earle's fascinating interview sheds light on such dangers:

> We had one case of an officer coming back from Transjordan who instead of following the track [a clearly marked line across the easternmost parts of Transjordan and the westernmost part of Iraq] ... decided he's cut a corner. And he didn't find the track again when he thought he should. He didn't get to Rutbah [an oasis village and airstrip on the marked track in western Iraq]. So he saw some Arab tents and forced landed. And they had some twenty odd aircraft, including Frenchmen, out scouring the desert looking for him for five days. They never found him.


ROYAL AIR FORCE
AERIAL PAGEANT
The London Aerodrome
HENDON
Saturday. JUNE 24th.
3 to 6 p.m.
"BOMBING A DESERT STRONGHOLD"
TICKETS (NO TAX) 2/- 5/- 10/- BOXES (FOR 6) FROM £6. CARS 5/-
ADVANCE BOOKINGS { KEITH PROWSE & Co. LTD. AND ALL LIBRARIES —
SEC. R.A.F. MEMORIAL FUND. 7. IDDESLEIGH HOUSE. CAXTON ST S.W.1.
The Aerial Pageant is The Royal Air Force Annual Training Display and is in aid of the R.A.F. Memorial Fund.

Few posters for a public event show the aggressive imperialism of interwar Britain more clearly than this advertisement for the Air Pageant at Hendon Aerodrome on Saturday 24 June 1922. The highlight of the show was when a flight of RAF aeroplanes demolished a "desert fort" defended by warriors of the "Wottnott Tribe", played by blacked up RAF personnel in eastern costume. (Author's collection)



A Westland Wapiti of No. 84 Sq. RAF over the Shatt al-Arab waterway in Iraq's deep south around 1929, with this unit's scorpion motif clearly visible on the front fuselage. No. 84 was based at Shaibah from 1920 to 1940. The scattered low-lying cloud had probably been ground-level fog earlier in the day. (Fl. Lt. Sharpe photograph)

> Eventually an Arab came in on a camel to Rutbah and told us where he was. The Arab was put in the front seat of a Victoria and [was] absolutely terrified but guided us back to where this fellow was. And he was only about forty miles from Rutbah.

At the start of 1928 the RAF's Headquarters in Iraq was moved from Baghdad to the large airbase at Hinaidi, followed by the RAF personnel who had been living in the Iraqi capital. Life was rarely quiet for the British in Iraq but the government in London had decided that a new relationship was needed with the Kingdom of Iraq. After prolonged and sometimes difficult negotiations, a new Anglo-Iraqi Treaty was signed on 30 June 1930, based upon the earlier Anglo-Iraqi Treaty of 1922.

For the British, the primary significance of the new Treaty was that it allowed the British Empire to maintain military bases in Iraq, the most important of which were substantial aerodromes which could accommodate the largest aeroplanes. The most crucial such RAF bases were at Dhibban (Habbaniya) west of Baghdad and at Shaibahnear Basra. Furthermore, British and British Imperial forces retained the right to take men and material through the country whenever they wished. In time of war the Treaty also stipulated that Iraq would offer the British "all possible facilities", including the use of rivers, ports, airfields, airlines and railways.

On 22 April 1931 the Iraqi Air Force officially came into being (see Volume Four) and on 3 October 1932 the British mandate came to an end. Before that, however, the Assyrian troops who formed the bulk of the RAF's Iraqi Levies had grown increasingly worried about their future with the establishment of an independent Iraqi kingdom. In the words of the aviation historian Barry Renfrew, in his book *Wings of Empire* (Stroud, 2015): "A plot by the Levies to quit British service and march north to seize territory for a homeland was uncovered in June 1932. British troops were flown in from Egypt to forestall the scheme, and the Assyrians eventually agreed to abandon their hopes". It was another step in the tragic story of Britain's betrayal of the Assyrian people.

Later the following year, approximately 800 Assyrian Levies took their rifles and fled into French-ruled Syria. However, the French mandate authorities sent them back across the border, whereupon these "rebels" against the newly established Kingdom of Iraq were attacked by Iraqi troops. Other Iraqi units now took matters further by attacking several Assyrian communities within Iraq, most notably at the village of Semal while the British refused to intervene in what was clearly a massacre, describing it as an internal Iraqi affair. Many in the RAF were nevertheless horrified by what they regarded as a betrayal of people who had been loyal to the British Empire.

With the end of the British mandate, Iraq became theoretically independent, though the Anglo-Iraqi Treaty of 1930 remained in force and British forces remained inside the country. A short while later the British Iraq Command was renamed as the British Forces in Iraq. Such a change had little impact on the RAF but was intended to reflect a new relationship between the British Empire and Iraq. British forces were gradually concentrated into two main bases, RAF Shaibah and RAF Dhibban (officially renamed RAF Habbaniyah in 1938), plus a supply depot on the Shatt al-Arab waterway in the far south of the country, where the Tigris and Euphrates rivers came together before flowing into the Persian Gulf.

Meanwhile the changing political relationship between Iraq and the British Empire was reflected in other ways, and many RAF officers who returned to Iraq in the 1930s, having served there in the 1920s, found that a British uniform and a European skin no longer provided immediate or unquestioned authority. British service personnel of all ranks were shocked to find that Iraqis no longer stepped aside for them in the streets as they had done, but now treated them just like everyone else.

It took longer for deeply engrained British colonial attitudes to change. These remained very patronising though, amongst officers if not so much amongst other ranks, there was normally an attempt to treat local staff fairly. This did not, of course, mean that "white" British officers regarded "brown" Middle Easterners as being their equals. For most such officers, including the junior, the Iraqis they came to know best were their own servants or mess staff. Once again Alfred Earle illustrated this relationship with candour and clarity. His bearer was a Kurd rather than an Arab, and he explained that RAF officers selected such men themselves, rather having them allocated by higher authority:

> When a new crowd of officers came in of course there were queues of servants looking for jobs. And they all had their chit books which really were books containing recommendations from previous employers. And you generally got advice from chaps who'd been there for some time and they would advise you, 'Well, this chap's bearer was with so-and-so and he was jolly good. You take him if you can get him'. That's how I got mine … And some of the chit books were very funny. You'd have a look at the chit book and see the chit said, one employer, 'This chap is lazy, dirty, and on no account should you employ him'. He [the would-be servant who clearly could not read English] produced this with great pride. Most of them were excellent. They were excellent chaps and they'd been with the squadron quite a long time.

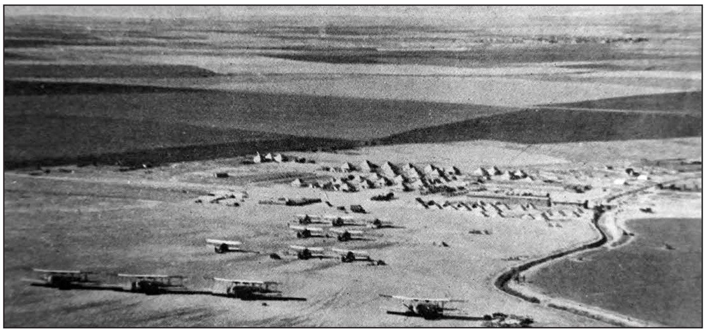
On the question of what such RAF servants wore, Alfred Earle explained:

> They wore a white uniform. A long white jacket, cummerbund in Air Force colours, and a white headdress with a band round it, again in Air Force colours, and a squadron crest, our chaps wore. And the barman I remember used to wear white, similar, but instead of the white headdress he used to wear a tarboosh [red fez] … You provided it [the uniform] for your own bearer, or at least you gave him the money to get it. He probably swindled you too but, I mean, that was normal. And the mess servants, the barmen, who worked in the mess were provided by the mess. We all had to pay our mess subscriptions in the normal way.

It is interesting to note that the British officer class, educated in the imperial attitudes of the time, generally seem to have been more tolerant in their attitudes towards Middle Eastern military forces than were their "other ranks", even including senior NCOs. The officers had more contact with the Iraqi Army and Air Force than they did with Iraqi civilians but Alfred Earle recalled that his squadron, No. 55, seemed quite popular on the streets of Baghdad:

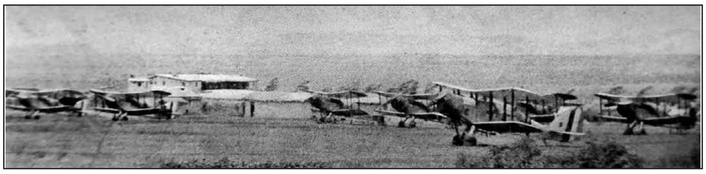
> The Arabs were very friendly, the shopkeepers were particularly friendly. We used to walk around the bazaars quite happily and do our shopping down there. If there were a number of us going in I can quite well remember driving in the taxi going into Baghdad in the evening, a bunch of Arabs sitting outside a chaikhana, coffee shop, as it went passed [sic] shouting 'Hama hamsin' [khamsa khamsin] – fifty-five in Arabic.

The King of Iraq was often invited to sporting events – the RAF firmly believing that strenuous sporting exercise was essential for the psychological as well as the physical wellbeing of men stationed anywhere in the Middle East. To continue Earle's recollections:



Irbil airfield in northern Iraq, the main base of the RAF strike force operating against Shaikh Ahmad Barzanji in the early 1930s. In the foreground are Vickers Victoria transports which were also used as heavy bombers. They appear to have high visibility wingtip markings. (Woodroffe collection)

A Westland Wapiti of No. 55 Sq. RAF over the hills of Kurdish territory in northern or north-eastern Iraq, photographed during operations in support of the Iraqi Army against Shaikh Ahmad Barzanji. (Author's collection)



Westland Wapitis of the RAF outside Dyana (now Suran) airfield in north-eastern Iraq in late 1932 or early 1933. They probably came from No. 70 Sq and had been operating in support of the Iraqi Army during one of the periodic Kurdish uprisings. (Author's collection)

A Westland Wapiti of No. 55 Sq. RAF patrolling the formidable mountains of Kurdistan in 1933. The squadron badge, consisting of a blue arm throwing a javelin, is just visible on the tail. (Fl. Lt. Sharpe photograph)

> The King used to come up to boxing tournaments and that sort of thing in the camp. I remember on one occasion we had a boxing tournament, I can remember a service policeman sort of pushing me and saying, 'Get out of the way you chaps! Get out of the way, I've got three kings behind me!' – and he had. The King of Iraq (Faisal I), the King of Transjordan [Abdullah I, still an Amir rather than a king] and the ex-king of Trans-Jordan [though in fact this third ruler was more likely to have been the ex-King of Hijaz, Ali Ibn Hussain who had been deposed in 1925].

Though Mahmud Barzanji's reign as self-proclaimed King of Kurdistan ended in 1924, the Kurdish rising continued to flare up or die down until 1932. Consequently, RAF squadrons in Iraq were intermittently called upon to bomb "rebels", their flocks and their villages. Being relatively safe in their aeroplanes, RAF aircrew could afford to feel considerable admiration for their foes far below. As pilot Alfred Earle said: "I think most of us admired him and thought they were jolly good chaps. I think our sympathies were more with the Kurdish hillmen than they were with the Arab [Iraqi] Army".

Not that RAF operations against Shaikh Mahmud Barzanji's followers were without danger. For example, Flying Officer Wells and his gunner, LAC Freeze-Greene, were either shot down or suffered engine failure shortly before this phase of the Kurdish rebellion came to an end. Wells badly damaged his shoulder in the resulting crash, following which he and Freeze-Greene were captured by the Kurds, or "Barzanis" as the rebels were generally known to the RAF. Freeze-Greene later recounted his adventures to his friend Alfred Earle:

> They took him into their caves – the Barzanis used to take refuge in caves – he and his gunner were taken into the cave. They killed a goat to get the skin to tie his shoulder up and when it was obvious it wasn't getting any better they sent a message in and asked the service [RAF] to send a doctor in. Which they did, and the doctor talked them into releasing the two of them …

Earle had recently been sent back to England following a crash (see below), but air gunner Spencer Viles was still in Iraq, and takes up the story:

> Wells, the pilot, was ... badly injured and Freeze-Greene landed the aircraft on a very bad piece of ground. And I think he was awarded the DFM for that. And he was captured … Then I was posted to 70 Squadron [from a previous posting in No. 55 Sq.] and I was just in time to get in on the surrender of Shaikh Mahmud [Barzanji]. And Flight Lieutenant Webster went up, with 55 Squadron as escort, and accepted his surrender in the hills. And also we recovered Flying Officer Wells and LAC Freeze-Greene and brought them back. And they were hospitalised for a while and sent back to UK.

When asked how these captured airmen had been treated, Viles said:

> They were treated fairly well. The food was bad, they had to eat what the rebels were eating up there whatever it might be. It was mostly goat meat … It was mostly a sort of a stew, no bread or anything like that, and no vegetables as such, they would eat roots and things like that the rebels used to find and eat … And they were in pretty fit condition when we got them back to. Anyway this caused a little peace for a while.

The troublesome Shaikh Mahmud Barzanji eventually surrendered to British and Iraqi forces, whereupon he was exiled to the south of the country in May 1932.

During the 1920s and 1930s the British mandated territory of Transjordan – now the Kingdom of Jordan – was regarded primarily as a British controlled corridor between Palestine, Egypt and the Mediterranean in the west, and Iraq, the Gulf and ultimately India in the east. The country largely consisted of desert and semi-desert steppe with only a small area of cultivated land and settled villages in the northwest. RAF operations in Transjordan continued to be controlled from Palestine until 1922. At the start of February 1920, No. 111 Squadron RAF was renumbered to become a reformed No. 14 Squadron. Initially based at Ramlah in Palestine, it flew Bristol F.2B Fighters and had been transferred east of the River Jordan, to Amman to support the new Amirate of Transjordan in April 1921. Nevertheless, its machines would also assist patrolling Palestine during the troubles which started in 1929.

A hand-tinted photograph taken at the aerodrome outside Amman in April 1921, shortly after the Cairo Conference at which the British Empire sought to impose its will across most of the Arab World. Sir Herbert Samuel, in a white solar topee, stands between T.E. Lawrence "of Arabia" and the Amir Abdullah, who would later become King of Jordon. Behind them is a Bristol F.2B Fighter of the RAF. (Cross & Cockade International)

From June 1924, No. 14 Squadron began getting De Havilland DH.9A bombers, these replacing the last of the old Bristol Fighters by January 1926. The DH.9As were themselves replaced by Fairey IIIFs in November 1929, these again being replaced by Fairey Gordons which were a more powerful radial engine versions of the same machines, in September 1932. The squadron's last interwar re-equipment came in March 1938 when it received Vickers Wellesley bombers.

In August 1924 a Wahabi ikhwan army suddenly appeared out of the desert a few kilometres from Amman. These ikhwan had arrived from Arabia without warning, causing panic amongst the local Transjordanian Bedouin and villagers. As they did in Iraq, Kuwait and within what is now Saudi Arabia, the fearsome warriors used age-old Bedouin raiding tactics, plus a degree of ruthlessness not seen elsewhere. Rarely interested in loot, and almost never taking prisoners, the raiders slaughtered all male captives other than small babies, in order to spread their fundamentalist Salafi or Wahabi version of Islam. Fellow Muslims were their primary targets, though infidels would also be crushed if they got in the way. The result was one of the RAF's least known but most successful campaigns. The Wahabi army which threatened Amman in 1924 was, in fact, attacked by RAF armoured cars operating in close coordination with

RAF DH.9As based in Transjordan and Bristol F.2B Fighters based in Palestine. The raiding army was torn to shreds, suffering major casualties whereas the RAF suffered just two men wounded.

In 1931 the aerodrome outside Amman was upgraded, but the very confined spaces available in this hilly part of central Jordan meant that a new RAF aerodrome at Mafraq, also established in 1931, served as the main base for international flights. From these aerodromes, the RAF supported the Transjordan Frontier Force and the Arab Legion (the Army of the Hashemite Emirate), not only providing reconnaissance information but also helping to quell occasional tribal unrest.

Lt. Col. Frederick Peake, Commander of the Arab Legion and previously an officer in the Egyptian Camel Corps (see Volume Two) purchased a De Havilland DH.60M Moth biplane and was taught to fly by an RAF instructor. Thereafter Peake Pasha, as he came to be known by his Arab soldiers, used his little Moth (registration G-ABMX as of June 1931) to make occasional unannounced inspection visits to Arab Legion outposts. These outposts therefore had to clear suitable landing grounds in case Peake Pasha suddenly arrived and, although the men were proud of their leader's prowess as a pilot, they are said to have felt themselves to be at a disadvantage when he was liable to appear out of the sky without warning. According to some sources Peake actually had two Moths, of which G-ABMX was still in flying condition in 1937 when it was sold to Moshe Katz, founder of the Palestine Flying Services at Lydda. Its fuselage still existed in 1948, when it seems to have been used for ground instruction by the Sherut Avir (which subsequently became the Israeli Air Force).

The Transjordan Frontier Force was, in its early days, a peculiar mixture of Arabs, Chechens, Turks, Kurds, Jews, Egyptians, Sudanese, Armenians, Russians, Yugoslavs, Javanese, Indo-Chinese, Germans, Africans and Greeks. Wearing uniforms which included some Circassian elements from the traditional costumes of the Caucasus Mountains, this mounted force possessed only one vehicle, a Ford van. Nevertheless, the men of the Transjordan Frontier Force were sometimes called upon the help the RAF, rather than being helped by them. On 6 February 1932, for example, six Westland Wapitis of No. 55 Sq. RAF got lost while flying from Iraq to Amman.

Amongst their pilots was Flg. Off. Alfred Earle, who recalled the incident with great clarity. Though he was lucky to survive, he suffered injuries which ended his operational flying, though not his broader career in the RAF. Earle and his colleagues enjoyed formation flying and considered themselves rather good at it. So they were delighted when No. 55 Sq. was selected to take part in a flying display over Heliopolis in Egypt. Early in February 1932 twelve Westland Wapitis of Earle's squadron set off from Hinaidi on what turned out to be a disastrous mission. They were to fly via Rutbah and Amman to Cairo:

> We took off before dawn ... and I was leading one Flight [of four aeroplanes]. We never made contact with the other two flights ... and half way to Rutbah we got caught in a very bad dust storm. No wireless communication with Rutbah – the dust storm normally interfered with wireless – and we couldn't get through. And eventually we forced landed in the desert. Found a flat piece of desert, four of us got down together, and we spent the whole day there and the night just where we were in the desert hanging on to our aircraft most of the daytime because bad gusts were coming along. One aircraft in fact got blown on to a wingtip, damaged the wingtip during the day. And next morning we put that aircraft off first to see if it was all right to fly. We had a good look at it. We had a rigger with us and he said he thought it would be all right. Pilot took off. That was all right. We took off. We got to Rutbah and found that one flight had managed to get through the day before. The others trickled in gradually while we were there. And we set off later that day for Amman.
>
> The weather got very bad and eventually we got trapped at fairly low level between the hills and the cloud well north of our intended track. And the formation got broken up in bad weather. I was trying to get back to the desert having lost the rest of my flight and eventually I found what looked like a big hill straight in front of me. I pulled up to avoid it. I avoided that and got on my back and virtually looped into the ground. And I was unconscious and I don't know how long until some Arabs – or Druzes – came along and pulled me out from underneath the aeroplane then pulled my gunner out.
>
> We were quite close to a village in Syria, Imtan, and we were taken in there. Later in the day two more crews arrived who's also crashed. And the following day three more. So actually eleven of us started, not twelve, from Rutbah [they had left the damaged aircraft at Rutbah]. So of the eleven, six of us crashed. The other five after a fairly hair-raiding flight arrived at Amman.

When the missing aeroplanes failed to arrive, they were assumed to have made emergency landings in the desert or to have crashed and so a unit of the Transjordan Frontier Force was sent to look for them. As the Wapitis' flight path would have taken them close to the frontier of French-mandated Syria, French officers and men of the Troupes Speciales du Levant offered to help search their side of the border.

By this date the Transjordanian Frontier Force possessed a number of motorised vehicles and so this expedition consisted of two British officers plus twelve other ranks. It was supposed to have two Buick "touring cars", one wireless vehicle and a Crossley Tender, the latter being essentially the same type of small lorry which had been used by the RFC during the First World War. The Crossley was left behind as the expedition set off from Zarqa at 1600 hours in 6 February. The others headed towards the hills of Qasr al-Hallabat, an early medieval Umayyad Islamic fort or so-called "desert palace" overlooking Azraq. The weather was cold, raining and almost blowing a gale. They then sent up rocket flares but got no response, so returned to Zarqa.

The following day another expedition left Zarqa under Major P.T. Goodwin, again at 1600 hours, and headed toward Mafraq but soon ran into difficulties. Two wadis were found to be in flood, but these obstacles were successfully "rushed" by the Frontier Force's vehicles. Then heavy snow started to fall, the temperature dropped to 14 degrees of frost and the wireless vehicle got bogged down at al-Samra, which was an abandoned station on the old Ottoman railway line from Damascus to Madina. This wireless vehicle had to be left behind with its driver and radio operator as the column pressed on through 10 to 14 centimetres of snow, following the railway because the ordinary track could no longer be seen.

Major P.T. Goodwin's expedition reached Mafraq at 2300 hours on the 8th and were informed by radio that one of the missing aircraft was on the ground somewhere within in a triangle formed by Amman, Dara'a and Imtan, the latter two lying just inside the Syrian frontier. In other words, it was somewhere within a substantial part of what is now north-western Jordan. Fortunately, the expedition was re-joined by its wireless vehicle whose radio operator had passed out because of the cold. Another vehicle was having difficulty because its lubricating oil kept freezing, while all of them still had to negotiate flooded wadis. Heading back to Zarqa, the column saw a lamp flashing at an estimated distance of 16 kilometres to the north and so they headed in that direction, to find that a French outpost, just on the other side of the frontier in the largely Christian village of Tisiyah, had been signalling them. Unfortunately, the French had no news of the missing aeroplanes and the Frontier Force column continued on to Mafraq, which was reached at 2330 on 8 February.

Here the near-frozen wireless operator was revived. Now at last they received news of some of the missing machines, being informed by radio from Zarqa that three Wapitis had landed near the Syrian frontier village of Imtan. Once again, the column set out, this time heading via the black basalt ruins of the Romano-Byzantine town of Umm al-Jamal and Tal Qays before turning northwards. Overcoming the same problems of cold, snow and flooded wadis, they reached al-Anaf, 10km short of Imtan but inside French-ruled Syria, at 0100 on 10 February. Here they were told by the French officers in command that the crews of three aeroplanes were now at Imtan and were safe.

After running into deep snow and having to be dug out by local Druze inhabitants, Major Goodwin gave up trying to continue by car and instead borrowed a horse from Lt. F. Mollat of the Léger de Levant (locally recruited light cavalry) and managed to reach Imtan at 1530. Unfortunately the small French aerodrome could not be used in current weather conditions, so it was decided that half of the grounded RAF personnel should be immediately evacuated on horses and mules borrowed from Capt. Desmaires of 1st Groupement des Escadrons Druses (recruited from the Druze population of Syria). The remainder would await the arrival of Flying Officer Lowe and Aircraftsman Burnett who were on their way. The latter arrived at Imtan before the horses and mules set off, having themselves endured a very difficult journey.

While all this was being arranged, French medics treated some RAF aircrews for their injuries. Amongst those hurt was Flg. Off Alfred Earle, who explained how a medic did what he could to Earle's damaged face with very limited medical supplies.

> Initially we were out in the Druze village for a week before people could get to us. There had been bad snow in the area and ground was almost impassable and the only attention I got was from a French Arab medical orderly. And the medical attention I got from him was to cauterize the wounds on the face with silver nitrate which was very painful. But unfortunately he apparently sealed the dirt in because when I got into hospital [in Palestine] eventually that blew up and I had to have it drained and various operations … Then I came home and had about another ten months in hospital.

The crews of the three other missing aeroplanes had been brought in a bit later, led by Fl. Off. Wells. Meanwhile, the first group, consisting of Fl. Off. Earle, a Sergeant and three Aircraftmen, set off from Imtan to al-Anaf which they reached safely at 1930 on the 10th. The Aircraftsmen were commended for their fortitude as none had been on a horse before and they had to ride in the dark, through snow that was sometimes over a metre and a half deep. They were then given warm accommodation by the French at al-Anaf.

The second group of RAF men set off the following morning, led by Fl. Offs. Wells and Howe. Once they had assembled at al-Anaf, the British aircrews departed by car towards Amman, reporting to the RAF Headquarters at 0200 on 12 February 1932 after an adventure that surely none had anticipated when they joined the Royal Air Force. The Westland Wapitis were reportedly all wrecked during this embarrassing incident.

After it was over, Major P.T. Goodwin of the Transjordan Frontier Force (TJFF) received the OBE, while Lt. Col. C.A. Shute, commanding officer of the Frontier Force, singled out a number of other Arab and British personnel for commendation. They included Lance Corp. Musa Awad who, in Shute's words, "worked extremely hard and handled his men very tactfully". Musa Awad would therefore receive "one extra good conduct stripe with pay, and seven days extra leave this year. I have also awarded three days extra leave to all the remaining TJFF personnel who were out on this column". Goodwin's report to the British Colonial Office on this little-known incident included a number of less complimentary remarks about the Bedouin tribes of the frontier area:

> Passing through El Defiane and El Keis areas, the tribes gave the columns a very cool reception. At Tel Keis, the headman of a section of the tribe Siadrat asked if I knew I was in Syria, and definitely refused to answer any questions, and turned his back on this column. Knowing half this tribe, I kept a sharp look out, as the column halted for the night half a mile from their camp. At Wadi Akib this same tribe refused to help to build the bridge, and were most unpleasant.

The bridge in question was a temporary one which the Frontier Force expedition needed in order to get its vehicles across a flooded wadi.

At the end of the First World War there were reportedly at least 44 aerodromes and smaller landing grounds in Palestine and Transjordan. Some had been used by Germans, some by Ottomans, some by the British and some by both sides. On 23 August 1928 tensions in Palestine boiled over as the indigenous Arab population finally realised that the British mandate authorities would do little to stop Zionist Jewish settlers purchasing ever more land from absentee owners who were only interested in getting a good price. The settlers were gradually also denying the non-Jewish majority from farming or grazing land which had been open to them for centuries. The RAF was called upon to help the British Army and local police restore order but, having been ordered not to open fire for fear of hitting innocent bystanders, proved ineffective as soon as those on the ground learned that such noisy "buzzing" was an empty threat. Even after the British airmen were allowed to use weapons, they could only fire guns, not drop bombs. Nevertheless, Palestinian dissidents thereafter generally attacked Zionist settlement by night, when the RAF was still almost entirely ineffective. Trouble would therefore rumble on until the full-scale Arab uprising or Great Revolt of 1936-39.

Far to the south, the British had been using aeroplanes to strengthen their position in and around Aden since 1915. Between the World Wars they continued to do so in the face of frequent encroachments by troops or tribes loyal to Imam Yahya of Yemen. The situation remained quiet in 1919, as Imam Yahya was focussed upon strengthening his own position inside Yemen (now the northern provinces of the Republic of Yemen) and it was only in 1921 that the British felt it necessary to maintain even a single Flight of RAF aeroplanes in Aden. From then on, however, the British became increasingly resolute in defence of the Aden Protectorate (now the southern and eastern provinces of the Republic of Yemen).

In the meantime, unrest in British Somaliland, on the other side of the Gulf of Aden, had so alarmed the British authorities that twelve De Havilland DH.9As were taken there aboard the Royal

Navy aircraft carrier HMS *Ark Royal*. They would form part of Z Force which had been assembled by the RAF in Egypt. In addition to the DH.9A bombers, Z Force included assorted motor vehicles, 36 officers, 183 men, and was commanded by Grp. Capt. Robert Gordon with Wg. Com. Frederick Bowhill as his Chief of Staff.

Having constructed a temporary aerodrome outside Berbera, the Force would then support the Somaliland Camel Corps and a battalion of the King's African Rifles against a so-called "dervish" army led by Muhammad Abdullah Hassan. He was a renowned Somali poet, as well as being a religious, political and military leader whom the British insisted on called "The Mad Mullah". Today, Muhammad Abdullah Hassan is justly regarded as a great Somali patriot and one of the heroes of African resistance to European colonialism. In 1920, however, the Somali revolt was crushed so rapidly and so successfully that this brief campaign added greatly to the credibility of the new Imperial doctrine of "air policing". The British were only experimenting with this idea and many men in the higher echelons of the British Imperial hierarchy still had limited confidence in its capabilities. As a result, RAF colonial outposts were persistently starved of funds.

The RAF Flight of Bristol Fighters, which eventually arrived in Aden in October 1921, did so just too late to prevent a Yemeni incursion in September that year, but by February 1922 they were ready. After protests and warnings had been sent to Imam Yahya, these aircraft bombed the headquarters of the Yemeni commander whose troops were operating in the Hawshabi and Subayhi tribal areas. This obliged the Imam's men to withdraw from Hawshabi country while the local balance of power swung in favour of the Aden Protectorate. Nevertheless, the British were still unable to regain the outpost of Dali, which had been lost earlier.

The Yemenis had no effective answer to British aeroplanes and felt that their opponents were using unfair weapons in what had previously been almost a contest between equals. On the British side of the frontier there was increasing confidence that a combination of aircraft and resistance by pro-British (and handsomely paid) tribes would be enough to keep Imam Yahha at a safe distance from the strategically vital port of Aden. Nevertheless, there were already signs that what had sometimes looked like a private war between Imam Yahya and the British Empire was going to change.

Meanwhile, on the other side of the Red Sea the Italian colony of Eritrea was becoming a source of concern to the British, especially after Benito Mussolini and his Fascist Party came to power in Rome on 31 October 1922, promising a revival of Italian imperial greatness and even some sort of recreation of the Roman Empire. For example, the Italian government started to question the legality of British control of the Kamaran Islands off the coast of Yemen, which the British had occupied but did not formally claim. During 1922 Italy also started to sell weapons to Imam Yahya and to seek diplomatic relations, in effect breaking what had been a British monopoly over foreign relations in this part of the Arabian Peninsula.

Perhaps partially in response to such Italian activity, the British invited Ras (Prince) Haile Selassie, the Regent of Abyssinia (now Ethiopia) to view a display of RAF power in Aden in November 1922. The future Emperor of Ethiopia had never even seen an aeroplane before and was duly impressed. Haile Selassie even asked to be taken up in one of the machines and, as he himself later stated, it was "very fitting that he, as regent of Abyssinia should be the first Abyssinian to take flight in an aeroplane".

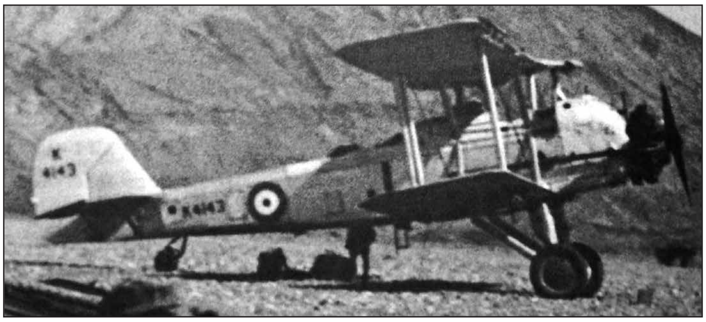
In 1923 both Italy and the Soviet Union opened diplomatic relations with the Imamate of Yemen, causing a flutter of concern within British Imperial corridors of power. The Soviet Union may have been far away, but the Italian colony of Eritrea lay on the opposite side of the Red Sea. Meanwhile an old irritant, if not threat, was removed when the Treaty of Lausanne settled the new Turkish Republic's relations with the outside world in July 1923, as well as giving international recognition to Turkey's new frontiers. As a result of this Treaty, residual Turkish cooperation with the Imam of Yemen came to an end. Between July and October 1923, the RAF's Flight of old-fashioned Bristol F.2B Fighters based outside Aden tried to give cover to local auxiliary troops, largely from the Awdhahi tribe, as they faced further Yemeni incursions. Nevertheless, some fertile territory was lost and instead of committing to further fighting, the British authorities decided to negotiate. This was because they realised that they had little choice with Imam Yahya seeking influence in the wealthy, mercantile, Hawdramawt region in the east of the Protectorate. This huge area had always been outside effective British control. It also consisted of a complex mosaic of tribal sultanates, all jealous of their autonomy and willing to play Imam Yahya and the British off against each other. Furthermore, the Hadramawt was beyond the range of Bristol Fighters operating out of Aden and it was both difficult and time consuming to send troops such a distance. All the British could do in the short term was to provide ammunition and substantial sums of money to friendly tribal leaders. The only other viable alternative was to construct RAF facilities in the Hadramawt.

Then, in September 1923, a substantial force of Imam Yahya's troops invaded the Baydha Sultanate which all agreed was part of the Aden Protectorate. This time the British not only sent a shipload of treasure to the neighbouring Sultan of Fadl, a major local leader based at Shuqra east of Aden, but also decided to construct a new airfield at Shuqra. From here it was intended that the RAF could extend its range of operations over distant and vulnerable Awdhali tribal territory. Although the new airfield was constructed in 1924, it soon became clear that the RAF's Bristol Fighters still lacked sufficient range to reach the undefined and barely agreed north-eastern frontiers of the Aden Protectorate. Indeed, the British authorities in Aden began to question the viability of their new policy of air control.

A new type of aeroplane was obviously needed, and in February 1925 No. 8 Sq. was brought from Iraq with its nevertheless rather archaic DH.9As. Commanded by an Australian officer named Wilfred McClaughry, No. 8 Sq.'s main home would be Khur Maksar (Khormaksar), as yet little more than an airstrip outside Aden. Consisting of an area of cleared sand, this lay so close to the shore that mistakes while taking off or landing could result in a crew finding themselves in the sea. Nevertheless, Khur Maksar would remain one of the RAF's main bases in the Arab World until the end of November 1967.

The year 1925 saw the British set about building a considerably more affective Aden Protectorate, politically, militarily and economically. Being accompanied by a notable hardening of British attitudes and policy towards Imam Yahya of Yemen, this almost led to a state of undeclared war. On the other side of the frontier, the Imam still claimed the whole of the Protectorate, except for the port city of Aden itself. Here it is also worth noting that this area, including Aden, would – after existing as the independent People's Democratic Republic of South Yemen from 1967 to 1990 – be incorporated into Yemen. Today there is still a significant separatist sentiment in southern Yemen.

Back in the 1920s and 1930s, Imam Yahya's claim continued to lead to clashes with local leaders, sultans and others, who preferred to remain effectively independent within the loosely organised



A Vickers Vincent (K4143) of No. 8 Sq. RAF in the Aden Protectorate in 1935. The squadron's base was Khur Maksar, though this newly delivered machine was photographed somewhere "upcountry". (Author's collection)

Aden Protectorate. As pressure from the Imam and his followers grew, the British reluctantly armed some tribal leaders under British protection, backing them up with aircraft to which the Imam's ramshackle army still had no reply, and in 1926 RAF bombing finally dislodged the Imam's men from Dali.

Nevertheless, negotiations proved fruitless while the failure of a diplomatic mission to the Yemeni capital led by Gilbert Clayton, a highly experienced Army intelligence officer and colonial administrator, caused consternation to the British authorities in Aden and London. Outside powers, not least Italy, were now taking greater interest in this part of the Arabian Peninsula, and many within the British imperial administration started to lose faith in diplomacy. Meanwhile the Air Ministry and the senior echelons of the RAF included officers and civil servants who thought the use of aerial force was the best answer. The increasing cost of keeping substantial troops in and around Aden led a growing number of such influential men looking at the example of Iraq, where the RAF had been given primary responsibility for maintaining the British position.

To quote the historian R.J. Gavin:

> The ideas of heavy retaliation, deep penetration and concentrated bombing were gaining ground amongst the airmen. As applied to South Arabia this meant a shift in emphasis from cooperation with tribal forces against limited objectives, to independent action by bombers against the main Yemeni centres. The Air Ministry was confident that it would adequately defend the Protectorate and was suspicious of any treaty terms which might inhibit their future action. While the RAF was developing this more extreme doctrine, the Aden administrators like Reilly [Sir Bernard Rawdon Reilly, the British colonial administrator who had designed the new system of administration and control in the Aden Protectorate] began to appear more and more in the guise of moderates.

Responsibility for the defence of Aden, its Protectorate and part of the coastline was therefore handed over to the RAF and resulted in a system not unlike that in Iraq. It would rely upon a single bomber squadron with twelve aeroplanes, plus an armoured car section to support an existing force of locally raised troops called the Aden Protectorate Levies; again much as in Iraq. Some of the men who joined these Levies had already served in the 1st Yemen Infantry, which had been disbanded shortly after the end of the First World War. Both formations had been recruited by Col. M.C. Lake and men from the Awlaqi and Awdhali regions in the east of the Protectorate were preferred, as they had also been in the 1st Yemen Infantry.

From a British point of view, one of the main advantages of this system was that it would supposedly cost £100,000 less than the existing military establishment. Over the following two years, the two battalions of British and Indian Imperial troops which had previously formed the Aden garrison, were withdrawn. To work effectively, the new system would have to be more aggressive, indeed expansionist in terms of pushing real imperial control deeper into the previously autonomous if not effectively independent sultanates of the Aden Protectorate. It would also have to be active rather than passive in relation to the Imamate of Yemen.

Potential threats would have to be defeated before they got close, and they would certainly have to be kept at a distance from Aden. It was already clear that the minimal available ground forces could not defeat a significant Yemeni incursion, let alone an invasion, so "hostiles" had to be destroyed from the air at the first opportunity. The limited range of available aircraft similarly meant that, if such a "forward policy" was to be effective, a network of forward airfields would have to be constructed. These would be built in the interior, to face the perceived threat from Yemen, and along both the eastern and Persian Gulf coasts of Arabia. As such they would eventually form a chain of airfields linking Aden with Iraq, while also joining another chain of airfields to link Iraq with India.

Rather than sitting behind the walls of Aden, the British armoured cars and local levies were expected to extend their activities deep into the Protectorate, establishing a defensive screen while supported by the RAF. In practice the policy of air control, as carried out in the Aden Protectorate, meant that modern aeroplanes had to communicate closely with troops on the ground, some of whom still used camel transport. Furthermore, if local tribal leaders became what the British regarded as troublesome, for example by refusing to pay fines when their people indulged in traditional pastimes of raiding and stealing from their neighbours or from merchant caravans, their villages would be bombed.

Such operations could be dangerous, as Yemeni tribesmen not only shot back but did so with remarkable accuracy and occasional luck. On one such occasion, the DH.9A of R.E. Penwarm was flying at an altitude of around of 1,500 metres when the engine was hit by groundfire. The pilot had to make an emergency landing amongst sand dunes. He then laid out the white cloths issued to aircrew to attract the attention of their flying colleague. Penwarm and his observer, and their aeroplane, were, in fact, soon spotted, but it took several days for a camel caravan to arrive with a new engine, plus RAF mechanics and their necessary tools. More days passed as the damaged engine was replaced, after which Penwarm flew back to Aden after a total of 16 days stranded in the desert of what is now the southern part of the Yemen Arab Republic.

Early in 1928, RAF aeroplanes at Khur Maksar were replaced by more modern, Panther radial-engine Fairey III Fs. These machines would greatly increase the RAF's potency around Aden. The year 1928 also saw the establishment of what was called the British Forces Aden Command under the RAF. Meanwhile, it took time for Imam Yahya and other local chieftains to "learn the new rules" and in 1928 some of Yahya's troops penetrated to within 80 kilometres of Aden. On 8 February 1928, the Shaikhs of Alawi and Qataybu, both of whom were allied to the British, were seized by Imam Yahya's soldiers.

British protests were ignored and so, from 21 to 23 February, Yemeni positions were bombed. Still the Alawi and Qataybu leaders were not released, so London gave authority for the RAF to take the fight into Yemen itself, authorising air strikes anywhere in the country. Early in March the Yemeni military headquarters at Qa'taba,

One of the RAF's R.E.8s (serial number C5112) at an unidentified Egyptian airfield. Originally allocated to No. 16 TDS (Training Depot Station) at al-Firdan, which was incorporated into No. 16 TDS in July 1918, number C5112 probably formed part of Y Provisional Squadron during the Egyptian disturbances of 1919. (Cross & Cockade International)

just across border, was bombed for five days. Furthermore, the town of Ibb, 100km further north was strafed by RAF aeroplanes and even the venerable city of Ta'izz was bombed. The Yemenis were clearly shocked by such an aggressive and wide-ranging response from the air.

Yahya al-Iryani, the leading Yemeni poet of the time, expressed their outrage at such unchivalrous British behaviour:

> This is barbarism,
>   When you come with what we do not have.
> A fight would be a fight,
>   Were you warriors who do not fear soldiers.

Elsewhere a small Bedouin force from the Marib area of eastern Yemen attacked Shabwah. They too were bombed until they retreated. These events led to the most serious crisis in British relations with the Imamate of Yemen since 1922 and many in both countries asked whether the British Empire was now at war with Yemen. Imam Yahya seriously considered a full-scale invasion of the Aden Protectorate and ordered that Yemeni forces start concentrating close to the frontier at Mawiyah. He also returned to the idea of establishing a Yemeni air force (see Volume Four).

Such was the fear of a general conflagration that diplomatic efforts were stepped up and a truce was arranged before matters got out of hand. The imprisoned sheikhs were finally released and the British authorities in Aden agreed to some minor changes to the frontier, though the Imam nevertheless insisted on his claim to the fertile Dali plateau. Meanwhile, Imam Yahya was facing trouble on the Tihama coastal strip of Yemen where rule by the Zaidi, Shi'a Imamate had never been popular. For their part the British colonial authorities in Aden encouraged this discontent and RAF activity continued for three weeks, attacking assorted targets in Yemen and breaking up concentrations of the Imam's troops. Pro-British tribal forces in the Protectorate then counter-attacked and from 14 to 16 July an assault on Dali obliged the Yemenis to withdraw across the border. This meant that, for the first time since the end of the First World War, Dali was again firmly under British control. A forward airfield was quickly cleared, enabling RAF aeroplanes to support local tribes as they fought off two Yemeni attempts to regain the area.

Despite this undoubted success for the RAF, sceptics continued to express doubts about the new system's ability to deal with a large-scale tribal assault upon the vital port of Aden. The latter remained the overriding reason why the British were in southern Arabia in the first place. Even the RAF's prompt crushing of an uprising by the Subayhi tribe in January 1929 did not entirely silence these doubters. There was similar disquiet amongst some local leaders in the Protectorate. In earlier times their support had been central to any military decisions made by the British. Now the RAF took such a leading role that local leaders could find they no longer had any control over events. The British Air Ministry also remained suspicious of any treaty obligations which might inhibit its freedom of action.

The RAF nevertheless pressed ahead with constructing a chain of airfields linking Aden to Iraq and India. By the end of 1930, aerodromes had been established in the Sultanates of Mukalla and Mahra in the easternmost parts of the Protectorate, and in the separate Sultanate of Muscat. Work continued through 1931, and in 1932 the Air Officer Commanding Aden met the Air Officer Commanding Iraq in the Sultanate of Muscat, both having brought along a flight of aeroplanes.

Another four years would nevertheless pass before this network was sufficiently developed for the first regular flights to be made between these important base areas of the British Empire. The structure of imperial defence was changing – indeed had already changed – with air routes gradually replacing the Royal Navy's sea routes as the major imperial arteries, at least in the Arab Middle East where the RAF already played the major role. In consequence, the defence of the most important aerodromes and air bases became at least as important as the defence of major seaports. Paradoxically this had the effect of threatening British-held Aden with redundancy as Aden's primary importance lay in its harbour as a secure naval base on the sea route between India and the Mediterranean through the Suez Canal. From a strictly air defence point of view, Egypt and Iraq, and the air corridor between them, were becoming more important.

In 1932, almost as a harbinger of things to come, there were three days of serious rioting in Aden between Muslims and Jews. In such a situation RAF forces could do nothing and eventually order was restored by 112 Arab members of the Aden Police Force. The following year was generally quiet and in 1934 the British and Yemenis finally reached agreement, signing the Treaty of Sana'a on 11 February. Nevertheless, further tribal unrest within the Aden Protectorate in 1934 showed that the RAF still could not always control things on its own. There were simply too many reasons for poverty-stricken tribesmen to plunder passing merchant caravans when they had an opportunity of doing so. Consequently, the British authorities in Aden came to the realisation that punitive air action had to be followed up on the ground, and so started to arm selected groups of trusted tribes with more modern weapons, including machine guns.

For nigh on a year there was relative peace within the Aden Protectorate until, in June 1935, part of the Lower Awlaqi tribe refused to allow a British Political Officer to move freely through their territory. This time the British decided that a serious example needed to be made. No fewer than three squadrons of 23 aeroplanes moved from Aden to forward airfields. For seven days they then imposed an aerial blockade on the troublesome tribesmen by flying umbrellas over dissident villages during the spring rains of May. The rains provided the only realistic crop-planting season, and the aeroplanes fired at anyone who ventured into the fields. Threatened with starvation, the tribes submitted to the Political Officer and paid a fine.

The policy of Air Policing had again proved a success, though RAF aircrew gained a healthy respect for seemingly fearless foes who appeared to have learned to judge the fall of a bomb, much as an English cricket player judged the fall of a ball. In the latter case such a skill enabled a fielder to catch the cricket ball; in the former the tribal sharpshooter merely ran a few metres to avoid the missile, then continued firing at the aeroplane.

At the end of the First World War the British in Egypt, including the RAF units based there, clearly expected a quiet life. During the final year of the great conflict the fighting had moved ever further away and Egypt became an unthreatened, though undoubtedly a very important, rear area. The RAF's role, under the existing Anglo-Egyptian Pact, was to defend the country against external attack, but there seemed to be no threat on the horizon. The RAF was also to defend the strategically vital Suez Canal, which again appeared to be in no danger. In fact, the only task which seemed to remain was to serve as a base for British military activity across the Middle East and part of Africa. Egypt was, of course, also a vital link in a chain of airfields while its normally clear and predictable climate made it an excellent location to train aircrew, especially pilots. As a result, No. 4 Flying Training School (FTS) would be established at Abu Suwayr in the Canal Zone on 1 April 1921 – the third anniversary of the creation of the RAF itself.

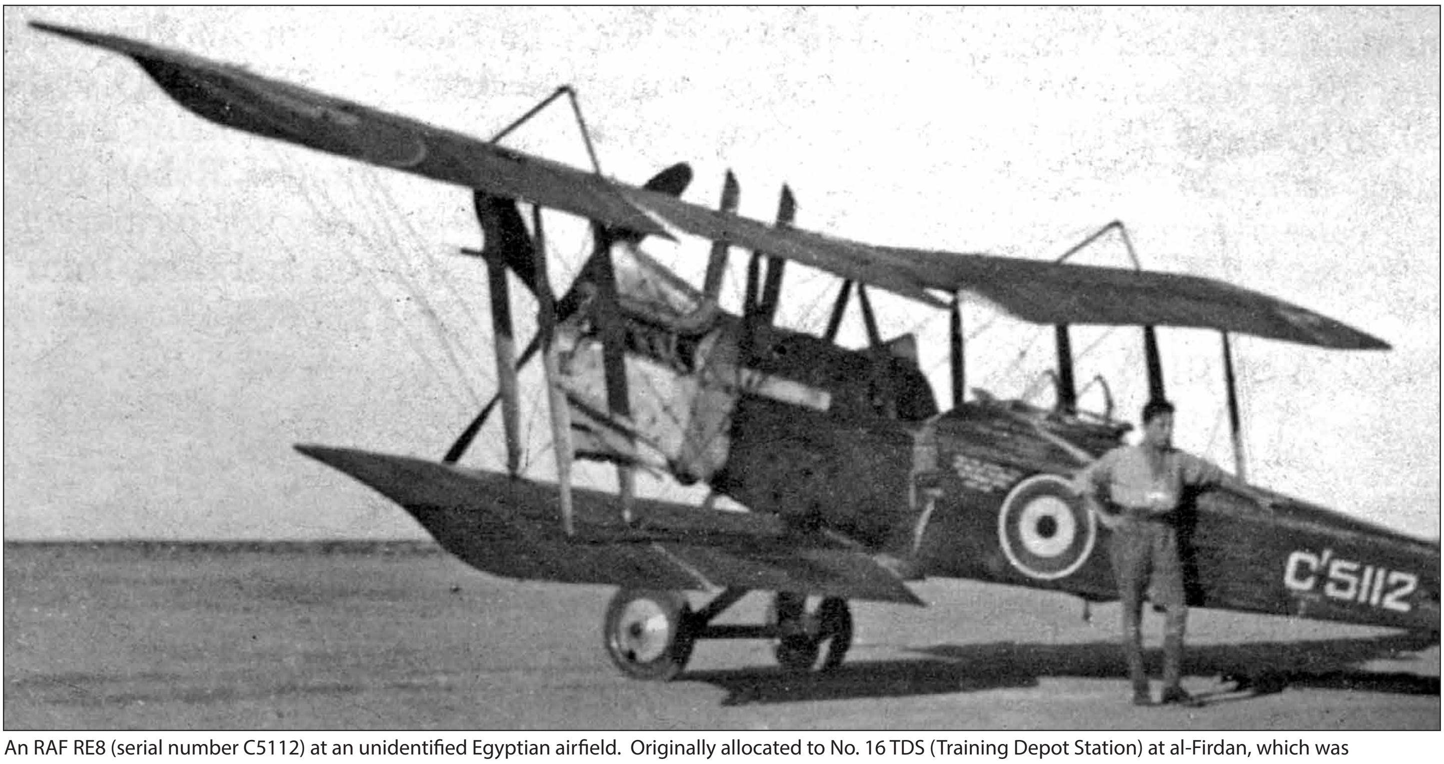
The British were therefore surprised by the vehemence of Egyptian protests when the country was denied a right to send a delegation to the Peace Conference in Paris. This was followed by the disastrous decision to arrest Sa'ad Zaghlul, leader of the Wafd Party; seemingly because he and his colleagues had been vociferous in their demands for Egypt to be treated respectfully as one of the victorious Allied countries. Zaghlul and three of his political associates were exiled to Malta on 8 March 1919, Egyptian protests grew louder and now threatened serious unrest. Sir Reginald Wingate, the British High Commissioner in Egypt, was made a scapegoat for this crisis and was recalled, to be replaced by Field Marshal Lord Edmund Allenby. In the event Wingate refused to stand down, feeling that he had been treated unfairly, and Allenby was instead given the title of Special High Commissioner.

In this situation the RAF in Egypt suddenly found itself diverted from its primary task of training, to helping subdue what the British chose to call "tribal unrest". Apart from a few Bedouin tribes in the desert regions, there were no real tribes in Egypt and had not been for many centuries, despite the fact that many Egyptian families claimed Arab tribal descent. In order to deal with the disorder, some new but temporary flying units were hurriedly created. One such was Y Provisional Squadron, which included very newly trained aircrew from No. 16 Training Depot Station at Abu Suwayr. This was part of the 26th Training Group, which also had stations at al-Firdan, Ismailiya, al-Rimal and Abu Qir.

Amongst these youngsters was Robert Norman Fawcett who only qualified as a pilot on 10 or 12 March 1919 and so it was either one or three days after receiving his wings that Fawcett found himself flying as an observer in an R.E.8 over the Nile Delta, looking for evidence of trouble on the ground. Low cloud meant that he and his pilot saw nothing, but Robert Fawcett was up a second time that day, and again on the 15th. Other sorties as an observer over the Fayyum area and Minya al-Hait (a village 12kms south of Fayyum town) followed, but without anything significant being seen.

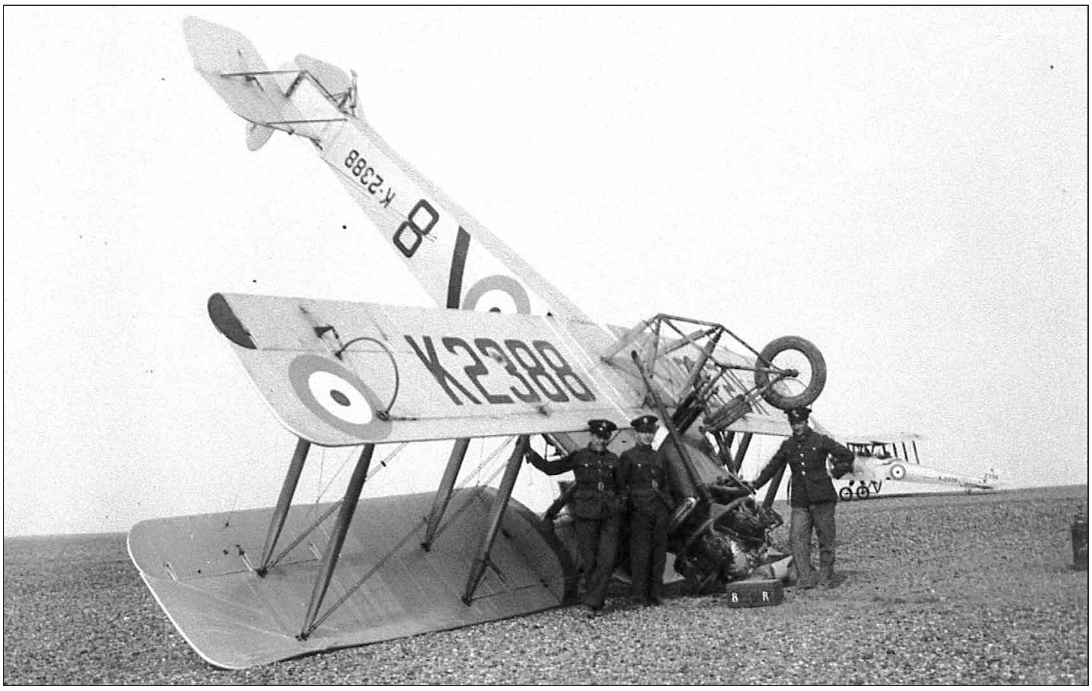
On 16 March, however, Fawcett was flying as observer in an R.E.8 number B6545 flown by Major Nicholas. They were in the air from 1410 to 1515 hours and Fawcett's logbook noted that they "machine-gunned the Benha-Zagazig [Binha to Zagaziq railway] line". Just over half an hour after landing, Fawcett was in the air, this time as observer to Capt. Sharpe in R.E.8 number B3786, bombing and shooting at unspecified targets – perhaps suspected "saboteurs" – on the railway line near what Fawcett's logbook called "Shayin al-Qanatir", perhaps Shibin al-Qanatir which lies just over 30kms north of the centre of Cairo.

The following day Robert Norman Fawcett made two further flights; the first being with Capt. Alder in Armstrong Whitworth F.K.8 number F4248 from 0640 to 0915, bombing and shooting at "rioters" at Bani Suwaif south of Cairo. This was followed by a half-hour flight over Hilwan which took off at 1030 but then suffered mechanical trouble. A specially ordered reconnaissance towards "al-Azib" was in R.E.8 number B6704 flown by Capt. Sharpe. It lasted from 1415 to 1730 and this time "rebels" were fired upon at unidentified "Bilowah", both these locations probably being in the general area of Fawcett's previous sorties. Next came a much longer



An RAF RE8 (serial number C5112) at an unidentified Egyptian airfield. Originally allocated to No. 16 TDS (Training Depot Station) at al-Firdan, which was incorporated into No. 16 TDS in July 1918, number C5112 probably formed part of Y Provisional Squadron during the Egyptian disturbances of 1919. (Cross & Cockade Archive) flight on 18 March with Capt. Sharpe, again in R.E.8 number B6704, which lasted three and a half hours. They flew along the railway line to al-Minya and Fayyum, bombing and machine-gunning people seen on the tracks. On 20 March a further flight was made to Fayyun with Maj. Nicholas in the same R.E.8 but this time they also landed at al-Wasta north of Bani Suwaif to supply police units with ammunition and messages. Other bombing and strafing sorties followed before Robert Fawcett found himself doing something different, this time dropping propaganda leaflets on 2 April. Following a sortie on 7 April, he was transferred to different quarters, and from then until 27 April Robert Norman Fawcett found himself taking part in more peaceful mail delivery flights.

The RAF's training establishments at Heliopolis, then on the northern outskirts of Cairo, were also drawn into this crisis. F.R. Wynne was one of the pilots stationed here, and he flew several sorties in Avro 504s to patrol such things as railway lines. This was, as Wynne recalled, very boring until he and some colleagues were ordered to break up a protest in a nearby village by buzzing the assembled crowd:


The identity of the flying student who tipped this Avro 504K (serial number K2388) onto its nose at No. 4 F.T.S. at Abu Suwayr is unknown, but the photograph, and another showing students "playing dead" on the other side of the machine, were taken by Hassan Tawfiq of the EAAF around 1934. (Tawfiq archive)

Many of the students at the RAF's No. 4 Flying Training School in Egypt brought cameras with them, which resulted in some fine but little-known photographs. Here an Armstrong Whitworth Atlas trainer is shown in flight in 1934 or 1935. (Tawfiq archive)

> When we arrived, the spectacle was both diverting and terrifying. The operation being quite unorganized, was highly dangerous and 'near misses' were frequent. A number of aeroplanes were gaining what height they could, diving towards the village to collect more speed than they were capable of and whizzing across it at roof top height from all directions. Some, having reached what they considered to be the prudent limit of their fuel, performed an aerobatic or two over the centre of the party before leaving for home. The row in the village must have been infernal. People were running out of it in all directions, but I did observe a number ... who were not running. They, I imagine, knew that no harm was intended or were enjoying the display.

The entire sortie was, in Wynne's opinion, a political rather than a military operation. The men of what had been the RNAS based in Egypt, who now formed part of the RAF, were also called upon. One of them was Flt. Lt. Eliot Millar King from New Zealand, who had flown in many parts of the Middle East during the Great War (see Volume Two). When Port Said was put on alert, King flew a reconnaissance of the area between Port Said and Damietta on 16 March 1919 with 2nd Lt. Miln as his observer. They were in Short 184 number N2648, which was one of the New Zealander's favourite machines and had the words Kia-Ora written on its tailfin. Kia-Ora is a Maori greeting, literally meaning "be healthy", which had been adopted by English speaking New Zealanders. It also became the brand name of a fruit squash in Australia from 1903 onwards. They saw nothing significant, however, as was also case with some other flights. Following these events, some British Members of Parliament claimed that the way in which the RAF was used to put down Egyptian unrest recalled German behaviour during the First World War. This was, of course, an exaggeration and deeply upset some of the airmen involved.

The crisis in Egypt died down during 1919, but the British still feared another upsurge of trouble and so, in December that year, the Imperial government in London sent a special investigative mission to Egypt led by Lord Alfred Milner. This culminated in the Milner Commission Report, which convinced the British government that a British Protectorate over Egypt was no longer viable. Instead

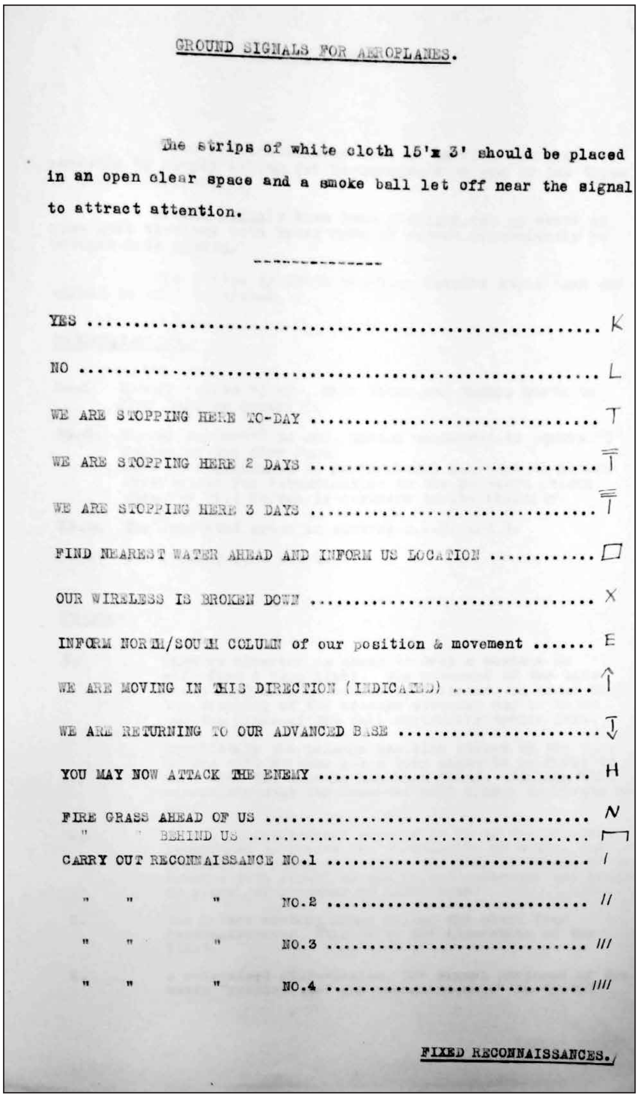
London and Cairo set about negotiating a new settlement based upon Egyptian independence and a treaty of alliance, while also ensuring that British Imperial defence, political and economic interests remained paramount. It is interesting to note that in 1919 Sir Frederick Hugh Sykes, the ex-Chief of the Air Staff and currently Controller of Civil Aviation in the United Kingdom, predicted that "Egypt is likely to become one of the most important flying centres. It is on the direct route to India, to Australia, to New Zealand, while the most practicable route to the Cape and Central Africa is via Egypt".

The following year a journalist described Heliopolis aerodrome as "the Clapham Junction [a notably busy part of the London railway network] of the Empire air routes". Other RAF bases also had a role in this expansion of air transport, the RAF Depot at Abu Qir playing a major supporting role by preparing aeroplanes for pioneering long distance flights as well as providing stop-over facilities for foreign aeroplanes transiting Egypt. Meanwhile, there was a period of reduced tension during negotiations which resulted in the country being declared an independent Kingdom. British forces within the country, including the RAF, remained on alert, as they continued to do throughout 1921.

Unfortunately, negotiations between Egypt and the United Kingdom broke down early in 1922 and so, strongly urged by Gen. Allenby the Special High Commissioner, the British unilaterally declared their acceptance of the Milner Commission's main recommendations on 28 February 1922. Milner's proposal for a treaty of alliance was nevertheless put to one side because it needed an agreement with the Egyptian government. Britain also reserved to itself complete control of "Imperial communications" both through and within Egyptian territory, including the Suez Canal, along with all overflying rights, the external defence of the country, the "interests" of foreigners resident in Egypt, and all matters concerning the Sudan. Sultan Fu'ad tacitly accepted this British fait accompli and assumed the title of King of Egypt on 15 March 1922. Egypt was therefore independent – because the British said so.

Sa'ad Zaghlul, who had been exiled first to Malta and then to the Seychelle Islands, had by now returned to Egypt and in January 1923 his Wafd Party enjoyed a sweeping success in elections. Zaghlul became the country's Prime Minister on 26 January, though he only held this position until 24 November. In the meantime, he led a team to London to negotiate with Britain's first Labour Party government (which lasted from 22 January 1924 to 4 November that year, roughly the same length of time as Zaghlul's premiership in Cairo). These talks failed and after Sa'ad Zaghlul returned to Egypt, sporadic rioting again broke out.

As mentioned above, trouble had started in southern Sudan with a relatively minor uprising amongst the Garjak Nuer tribe late in 1919. Their territory straddled the Sudanese-Ethiopian frontier and largely consisted of land which became a malarial swamp during the rainy season as the hugely expanded Sobat river poured from the Ethiopian highlands. The Anglo-Egyptian colonial administration asked for support from the RAF. This was sent from Egypt in the form of H Unit commanded by Fl. Lt. (acting Sq. Ldr.) R.M. Drummond. It consisted of four officers, Drummond himself, Fl. Off. (acting Fl. Lt.) G.C. Donnell, Flg. Off. G. Robinson, Flg. Off. E.R. Stafford and Flg. Off. F.A. Giles, 16 other ranks and six Egyptian employees. They had two DH.9A reconnaissance bombers, spares which should have lasted four months and medical support in the form of Bimbashi G. Biggam of the Egyptian Army with one medical orderly.



GROUND SIGNALS FOR AEROPLANES.

The strips of white cloth 15'x 3' should be placed in an open clear space and a smoke ball let off near the signal to attract attention.

YES	K
NO	L
WE ARE STOPPING HERE TO-DAY	T
WE ARE STOPPING HERE 2 DAYS	T̄
WE ARE STOPPING HERE 3 DAYS	T̿
FIND NEAREST WATER AHEAD AND INFORM US LOCATION	☐
OUR WIRELESS IS BROKEN DOWN	X
INFORM NORTH/SOUTH COLUMN of our position & movement	E
WE ARE MOVING IN THIS DIRECTION (INDICATED)	↑
WE ARE RETURNING TO OUR ADVANCED BASE	↓
YOU MAY NOW ATTACK THE ENEMY	H
FIRE GRASS AHEAD OF US	N
" " BEHIND US	⊓
CARRY OUT RECONNAISSANCE NO.1	/
" " " NO.2	//
" " " NO.3	///
" " " NO.4	////

FIXED RECONNAISSANCES./

A chart showing symbols to be used by Egyptian troops on the ground to communicate with RAF aircraft during their brief campaign against Garjak Nuer dissidents in the Sudan in 1919. (National Archives, Doc. 1919 AIR 20-680, London; author's photograph)

This tiny force arrived at the small town of Nasir, on the River Sobat where the men enlisted local labourers to clear a small airfield. In the air by January 1920, the DH.9As of H Unit were quickly sent to support two columns of troops and police as they headed into unfriendly territory in a punitive operation called Patrol No. 71. Amir Alay C.R.K. Bacon (Bacon Bey) OBE was the Officer Commanding Patrol No. 71, and he noted with satisfaction that this was the first time the active air operations carried out in support of the Egyptian Army in Sudan since the Darfur campaign of 1916.

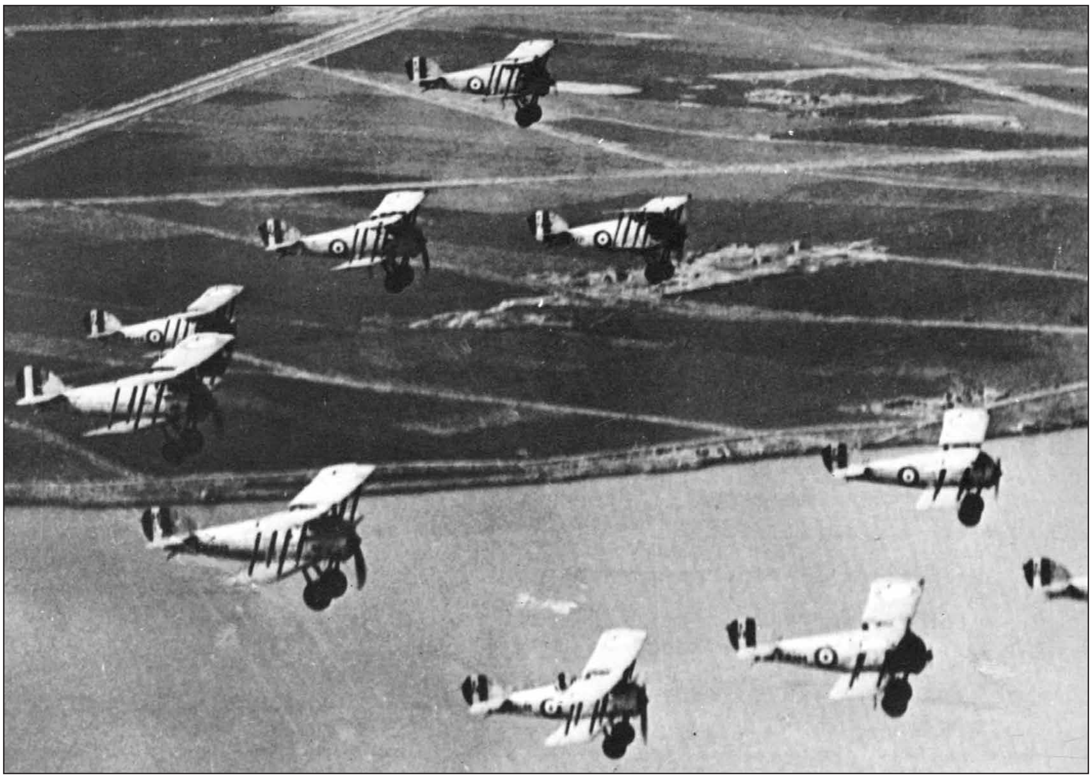
The first operational reconnaissance was flown on the last day of January, with the officer in command of the Egyptian Army column or patrol serving as the aeroplane's observer. The Column's proposed route to its advance base was studied and the country between the River Baro and Adura examined for signs of the enemy crossing the frontier into Abyssinia (Ethiopia). Mail was also dropped to the Advanced Base. On 8 February incendiary bombs were dropped into the long grass to deny the enemy cover; nevertheless the enemy still attacked the column after aeroplanes left the area – this happening on several occasions.

The RAF aircrew found it extraordinarily difficult to identify or even to see any potential "hostiles" in the dense greenery of huge swamps which were often shrouded in low-lying mist. Furthermore, when local inhabitants were spotted, they normally made no attempt to flee but just watched flying machines which they had never seen before. It was therefore impossible for British airmen to say with any certainly whether the people on the ground were friends or foes. It was apparently later discovered that the Nuer had not realised that there were human beings inside these strange and noisy new birds. Sometimes the Nuer tried to placate the machines or even to "enlist them to their side" by offering sacrifices.

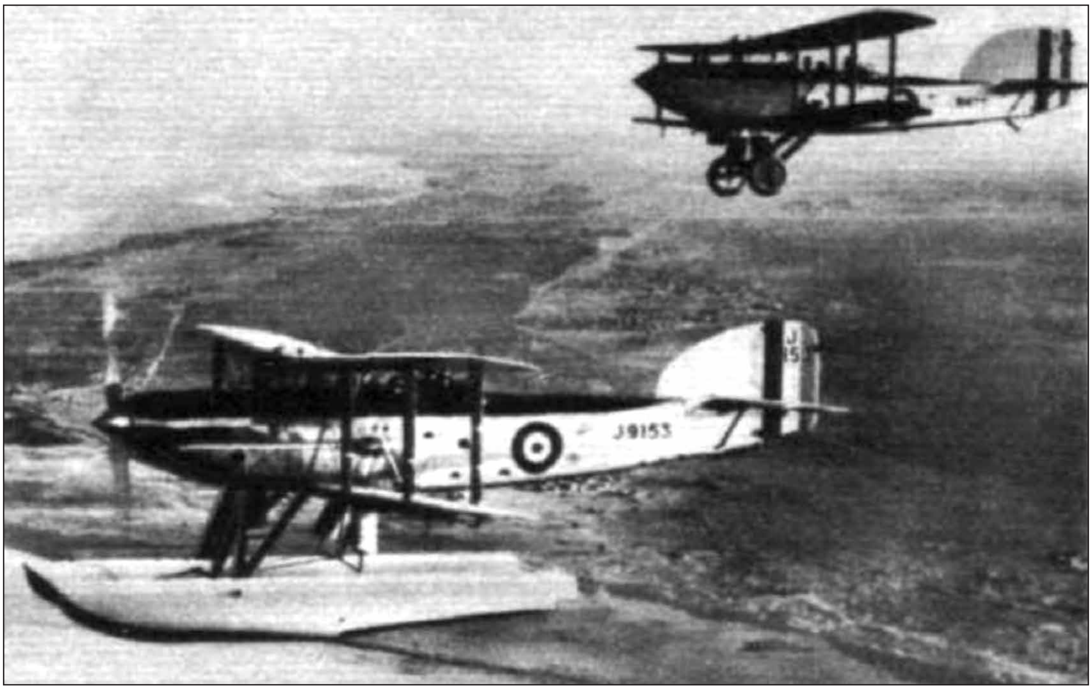
Even when a settlement was identified as hostile, then bombed or machine gunned, the inhabitants rarely fled. The DH.9A pilots and air-gunners therefore tended to report inflicting substantial losses on the "enemy", though such estimates were later found to be greatly exaggerated. By the end of these patrols in support of Egyptian Army columns, 50 incendiary bombs had been dropped, one hundred and sixty-five 25lb Cooper bombs, roughly 7,000 machine gun rounds fired, 45 flights made and 97 hours flown. Machine gun fire from the observer-gunner's position had proved less effective than expected because the Garjak Nuer seldom panicked and it was therefore suggested that forward gunfire would have been more effective. The DH.9As sent to south-eastern Sudan did not, however, have forward-firing machine guns.

One of the RAF aeroplanes had also come down as a result of mechanical failure and was damaged. Then, on 18 February 1920, the unit's workshop caught fire and most of H Unit's spare parts were destroyed. The airfield was too small for a large Handley Page 0/400 transport aeroplane to land carrying new spares, so a resupply column had to be sent from Khartoum, 700kms to the north, carrying the necessary items on river boats to Malakal, then on baggage camels to Nasir.

Meanwhile the surviving DH.9A remained operational by taking what was needed from the damaged machine. It now also had to provide cover for the approaching supply column but crashed on 3 March. H Unit could do nothing further until the spare parts arrived two weeks later, but a replacement DH.9A was flown from Khartoum, via a newly cleared airstrip at Malakal. An aeroplane had to fly because the River Sobatwas not navigable at that time of year. According to Fl. Lt. R.M. Drummond's "RAF Operations Communique No. 2, on the Operations of H Unit, RAF in South-Eastern Sudan from January to June 1920", the greatest credit was due to Flg. Off. Giles and mechanic AC2 L. Humphries who carried out this flight. They left Hilwan south of Cairo at 0533 hours on 26 March 1920 and landed at Nasir at 06309 on 1 April, having flown approximately 2,900kms in 20 hours 10 minutes flying time. When H Unit's participation in Patrol No. 71 was over, a special note was



Sopwith Snipes of No. 1 in flight over the Euphrates in Iraq in 1925. They are led by Fl. Lt. Oswald Gayford who was the acting CO of No. 1 Sq., and the photograph may have been taken on the same occasion as that showing No. 1 Sq. Snipes over Kadhimain. (Fl. Lt. Sharpe photograph)

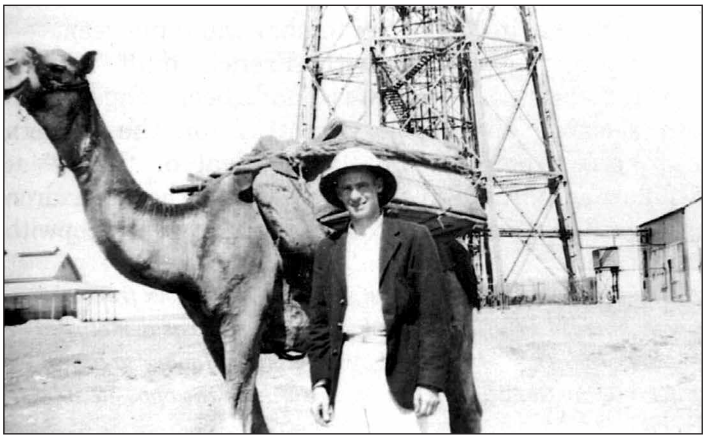


Fairey IIIs in both the seaplane and wheeled versions from No. 47 Sq. RAF, flying near the Sudanese capital of Khartoum in 1929. (Author's collection) entered into the service record of No. 249376 AC2 Humphries on 22 November 1926, with a special commendation for his work.

It had proved impossible to destroy Nuer war-parties from the air. So, once the two aeroplanes were repaired, the commanding officer of this strange little campaign by the Egyptian Army, the British Amir Alay (Col.) C.R.K. Bacon, decided that Nuer villages must be attacked. The authorities subsequently admitted that this resulted in women, children and the elderly being "punished" for the supposed misdeeds of the tribe's fighting men – the latter generally being impossible to find, let alone to "punish". Furthermore, RAF aircrew found that the cattle which were central to the Nuers' nomadic way of life, could rarely escape in the marshy terrain, often being confined to islands in this rainy season. They thus made ideal targets and were slaughtered in great numbers.

On the other side, the Garjak Nuer warriors relied upon their rifles and thus employed wide enveloping movements when in contact with regular troops, remaining at a distance, using all available cover and never grouping together for an old fashioned spear charge. Although the Garjak Nuer could move much more quickly than ordinary infantry in this sort of country, the two Egyptian Army columns enjoyed significant technological advantages. For example, throughout the operation a "pack wireless set" enabled the Officer Commanding Patrol No. 71, who was with the Southern Column, to communicate with a wireless station at Nasir airfield.

If the pack wireless sets broke down or could not be used, communication with the aeroplane crews was done by means of ground signals made of strips of white cloth. These were five metres long, one wide, and formed a number of patterns which were placed in a clear open space. A "smoke ball" was then let off near the signal to attract the airmen's attention. The troops were also told to ensure that "the strips of cloth denoting numbers other than one should be well separated". Although only two DH.9As were involved in this little-known operation, the RAF's H Unit probably played a decisive role and a great deal was learned. Hugh Trenchard, Chief of the Air Staff since 31 March 1919, described it as a model for future "colonial policing". In the meantime, H Unit had returned from Nasir to Khartoum aboard the Nile steamer *Lord Cromer* in June 1920.



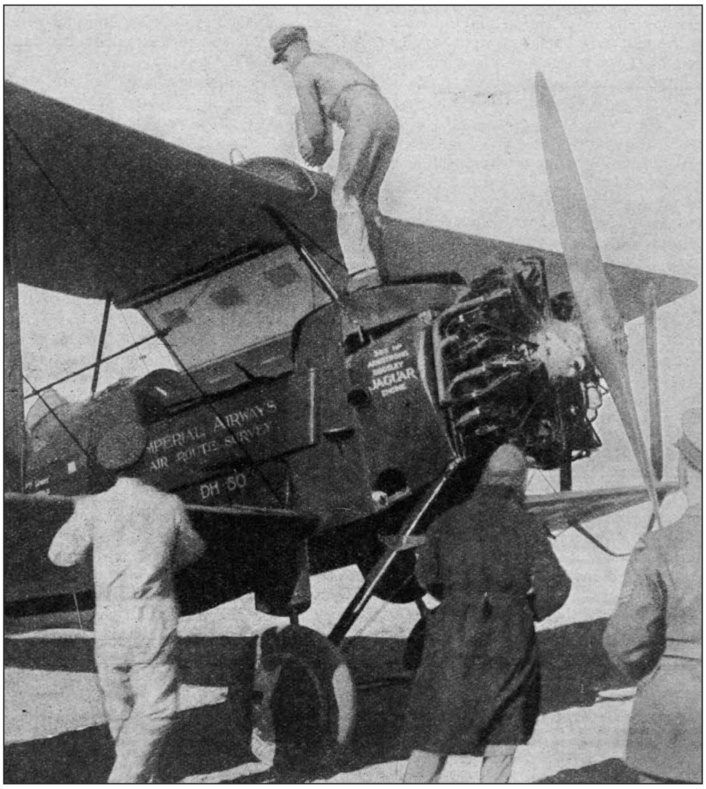
Flt. Lt. George Cook of the RAF, here wearing "civvies" with one of the baggage camels which played a vital role bringing supplies to isolated RAF aerodromes in Egypt. Photographed in the 1920s, Cook and the camel stand in front of the nearly completed airship mooring mast at Ismailiya. (Mowthorpe Collection, Cross & Cockade archive)

There were potentially more serious disturbances in the Anglo-Egyptian Sudan in 1924. Here the British had only allowed lower to middle ranking Egyptian Army officers and administrators to serve, while men above a certain rank were confined to Egypt. Since 1920 there had also been a number of murders of British subjects. Nevertheless, this policy was neither the only nor the main reason for military disobedience and occasional violence which broke out in spring and summer 1924, mostly amongst Egyptian troops based in the Sudan. A Detached Flight from No. 47 (Bomber) Sq. RAF was therefore sent to the Sudan, arriving in Khartoum on 16 August under the command of Fl. Lt. J. Whitford.

Members of the local Bedouin tribe, probably from the Banu Hamidah, in front a De Havilland DH.10 Amiens Mk. III of No. 216 Sq. at Landing Ground (LG) D, in the desert between Jordan and Iraq. These machines carried the first air mails between Cairo and Baghdad, starting on 23 June 1921. (Royal Jordanian Geographical Society)

On 19 November 1924, Sir Lee Stack the British *Sirdar* or Commanding Officer of the Egyptian Army was shot three times by a group of Egyptian students in Cairo. He died the following day. Gen. Allenby demanded and received substantial compensation from the Egyptian authorities, along with other concessions including the removal of all Egyptian military personnel from Sudan. Sa'ad Zaghlul also resigned as the Egyptian Prime Minister four days after Stack's death, to be replaced by Ahmad Ziwar Pasha, the President of the Egyptian Senate, ex-governor of Alexandria and a loyal supporter of King Fu'ad. The Wafd Party then remained in opposition under the leadership of Sa'ad Zaghlul and for a while cooperated with Egypt's small Socialist Party.

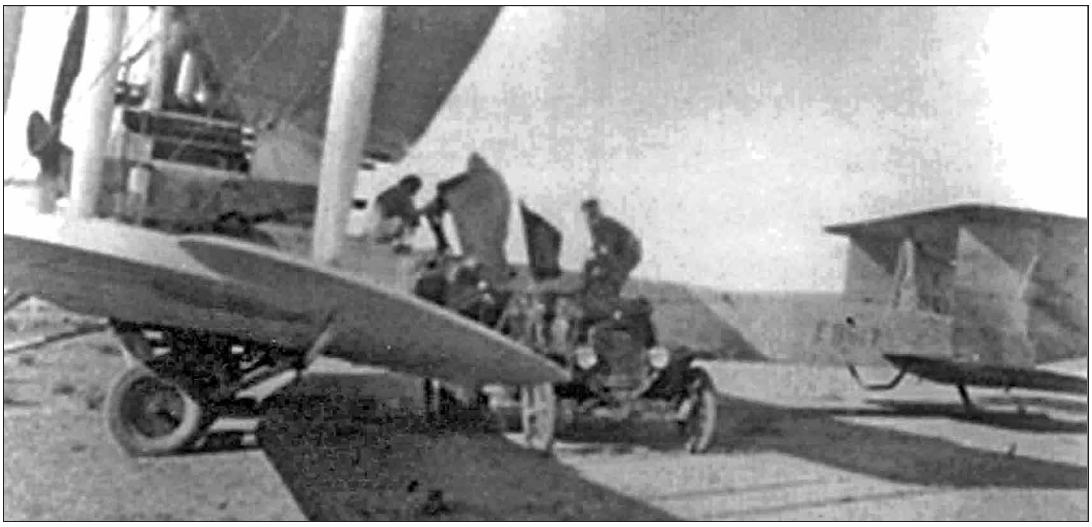
Amid this political tension and fearing further trouble in the Anglo-Egyptian Sudan, the Detached Flight of No. 47 Sq. in Khartoum got a new CO, Fl. Lt. G.Y. Tyrell replacing Fl. Lt. Whitford in December 1924. Subsequent commanders of this RAF unit were Fl. Lt. J.E. Salt AFC from March 1925, Fl. Lt. R.L. Crofton from October 1925 and Fl. Lt. O.R. Gayford from February 1927. Oswald Gayford had effectively been in command of the Sopwith Snipe fighters of No. 1 Sq. in Iraq since December 1924, when the CO fell ill. He has been described as "one of the best-known characters of the peacetime RAF", popular and a good administrator. He stayed with the unit after a new CO, Sq. Ldr Cyril Lowe, was appointed in January 1926 and, after No. 1 Sq. returned to the United Kingdom in October 1926 leaving its Snipes in Iraq to be scrapped, Gayford also remained behind, being sent to take over the Detached Flight of No. 47 Sq. in the Sudan a few months later.



RAF personnel were often called upon to assist civilian flyers in the Middle East. Most of the latter were merely passing through and needed technical support. Others were famous aviators aiming to establish a record. Here Sir Alan Cobham's DH.50 aircraft is being refuelled at a Cairo aerodrome during its flight from England to South Africa in December 1925. (Author's collection)

Though somewhat cut off from the rest of the service, No. 47's Detached Flight in the Sudan had an occasionally interesting time. For example, on 12 August 1926, three aircraft were sent to Dongola, on the west bank of the Nile in Nubia, in order to search for an Armed Motor Car Convoy lost in the desert. This convoy had been on an exploratory mission, looking for some unmapped water wells which reportedly lay about 130kms west of Dongola. It turned out that there was nothing there except volcanic outcrops and the vehicles seem to have got stuck near the edge of the Jabal Abyad plateau. According the Detached Flight's records: "Reconnaissances were carried out on 13th, 14th and 15th August, and the cars were finally located on the last day. The aircraft landed with water and found the occupants in a very exhausted state. The local authorities admitted that the convoy was undoubtedly saved by the aircraft".

On another occasion four of the Flight's aeroplanes were sent to the southern part of Kordofan province. According to Fl. Lt. O.R. Gayford's report they were "to take part in operations which were being carried out against a rebel tribe in the Nuba Mountains south of Dilling. Five bombing raids and two reconnaissances were carried out in the course of the operations. All aircraft returned to Khartoum on February 9th. The operations were entirely successful".



The severely injured Shaikh Murdhi al-Rufidi, leader of an important Arab tribe, being assisted from a Ford Tender into a Vickers Vimy (F8617) of the RAF. This took place at the isolated airfield of al-Jid, otherwise known as LG 4, in July 1931. (Author's collection)

However, to the north in Egypt, the British faced major difficulties for several years, searching for Egyptian political leaders who were both sympathetic to the British Empire and enjoyed significant support within Egypt. In so doing, the British were seeking the impossible, an endeavour made worse by the fact that many senior political figures in the United Kingdom, such as Winston Churchill, felt a profound and sometimes racist antipathy towards Egyptians and especially towards those of the social elite or so-called effendi class.

The RAF as a whole was undoubtedly permeated by the racism which characterised British and other western societies during this period. Consequently, there was profound antipathy towards the idea of "natives" learning to fly, and even being allowed to work in technical workshops. Within the RAF there was a fear that such a development would undermine the belief that "white men", especially "British white men", were racially and culturally superior.

Such attitudes were also reflected in popular literature. For example, a novel published in 1923 and written by P. Anderson Graham, the editor of *Country Life* magazine, was entitled "The Collapse of Homo Sapiens". It told how African and Asian students were taught in British universities, then went home and built air forces which subsequently bombed London. Nor was this the only example of what most of today's readers would dismiss as racist rubbish. In 1938 the prestigious Oxford University Press published *The Black Planes* by Wilfred Robertson (illustrated by the author's uncle, Jack Nicolle), which told a similar story but set in sub-Saharan Africa.

Following the trial and conviction of the students who killed the *Sirdar* Sir Lee Stack, Gen. Allenby was replaced as British High Commissioner by Lord George Lloyd in May 1925. Many believed that relations between Egypt and the British Empire could gradually improve, and the RAF played its part in attempting to promote goodwill. For example, in February, No. 208 Squadron based at Heliopolis put on an air display, partly to entertain but perhaps more importantly to impress the local inhabitants. No. 208 had itself been reformed at Ismailiya in the Canal Zone at the start of February 1920, simply by renumbering No. 113 Sq. Initially equipped with old R.E.8s, it had almost immediately been given Bristol Fighters, though these were still a First World War design. After about a year stationed at Yeşilköy (then still called San Stefano) outside Istanbul in 1922, No. 208 returned to Egypt where it continued its role as an army-cooperation unit. In 1930, No. 208 Sq. at last received more modern Armstrong Whitworth Atlas aeroplanes which would themselves be replaced by Hawker Audaxes and Demons in 1935.

Meanwhile No. 47 would become the first RAF squadron to be permanently stationed in what was still nominally the Anglo-Egyptian Sudan. The unit had been reformed in Egypt in 1920, initially equipped with DH.9As, and had a detached Flight in Sudan since 1924 (see above). In October 1927 the entire squadron was sent to the still rudimentary aerodrome outside Khartoum. The following December No. 47 Sq. was re-equipped with Fairey IIIF, one Flight having its Faireys fitted with floats so that they could operate from the Nile and its major branches as well as patrolling the Red Sea coast. However, No. 47 Sq.'s primary task was to cooperate with the Sudan Defence Force and it was led by Sq. Ldr. E.L. Howard-Williams from February 1930 until January 1933.

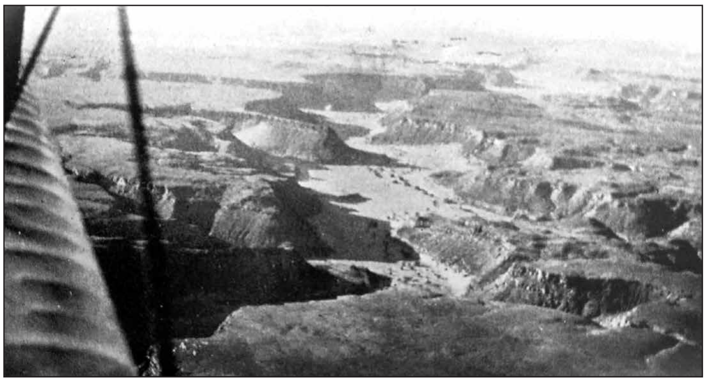
In the winter of 1930-1931 Col. Wilson of the Sudan Defence Force led a column of motor vehicles, supported by some Fairey IIIFs from No. 47 Sq., to make a reconnaissance of the area around Mirga oasis in the Jabal Uwaynat. Wilson had hoped to locate the mysterious oasis of Bir Bidi but, despite taking a famed local guide named Bidi Awad into the air with them, these aeroplanes failed to find the "lost oasis", largely because one of the Faireys became unserviceable. There was no way of repairing it, so far out in the desert where the Sudan, Egypt and as yet unconquered though nominally Italian Libya met. Despite never having flown before, Bidi Awad did manage to identify the previously barely known Wadi Abd al-Malik, which was duly photographed from the air. When the modern frontiers were finally agreed in 1934, this locality would fall just inside Egyptian territory.

Col. Wilson's expedition undoubtedly provided some of No. 47 Sq.'s crews with valuable deep-desert experience. In January, their Fairey IIIFs were replaced by radial engine Fairey Gordons, until these were themselves replaced by Vickers Vincents in July 1936. One Flight of Gordons fitted with floats nevertheless remained to patrol the Sudan's coast until a few months before the outbreak of the Second World War.

Fairey IIIF seaplanes of No. 47 Squadron RAF moored on the Blue Nile at Khartoum in 1930. (Author's collection)

More likely to impress ordinary Egyptians in a positive manner were the graceful airliners that passed through Egypt as they opened up the British Empire through air travel. In 1931 Britain's Imperial Airways introduced a weekly service to and from Mwanza on Lake Victoria in Central Africa. The route was extended to South Africa later that year. No machine was more closely associated with this period of luxury and romance in commercial flights than the giant Handley-Page H.P.42, which made its first commercial flight in June 1931.

There were two versions, the H.P.42E ("Eastern") specifically designed for long-distance routes to India and South Africa, and the H.P.42W ("Western") designed for European routes. The main difference between the E and W versions was in the proportion of space and weight allocated to passengers or to baggage. Thus, the E carried fewer people on the assumption that, because they would be travelling so far, they would require more luggage. A third variant, the H.P.45, had more powerful engines. The H.P.42s flying the India and Africa routes were actually based in Cairo and, together with the other variants, were described as the world's first real airliners.



The Wadi Abd al-Malik in the virtually unexplored Jabal Uwaynat, photographed from the air for the first time by the crew of a Fairey IIIF from No. 47 Sq, in the early 1930s. Nearby the frontiers of Sudan, Egypt and as yet only nominally Italian Libya met. (Egyptian Geographical Society)

Elly Beinhorn, one of Germany's best-known female pilots, outside the Misr-Airwork hangers at Almaza on the north-eastern outskirts of Cairo in April 1933. Her Heinkel 71 (registration number D-2390) is being refuelled during the early part of her flight around the African continent. (Author's collection)

Some of the glamour of these magnificent aeroplanes also rubbed off onto Cairo, especially as air passengers normally stayed in the famous Shepheard's Hotel overlooking the Nile.

Other countries also continued to use aviation to enhance their own prestige in this part of the world, including Germany. On 4 April 1933, just nine weeks after Adolf Hitler became Chancellor of Germany, Fraulein Elly Beinhorn took off from Berlin in a Heinkel 71, registration number D-2390, which had been modified with an 80hp Hirth engine, an enclosed cockpit and long-range fuel tanks. Elly Beinhorn was already one of her country's leading "aviatrix" or women pilots, having completed a remarkable round the world flight in a Klemm Kl 26 in July 1932. For this she was awarded the annual Hindenburg Trophy for that year's most outstanding German aeronautical achievement, though it was shared with Wolf Hirth who was rewarded for his achievements in unpowered flight, gliding or soaring.

This time Fraulein Beinhorn's intention was to fly around the continent of Africa, starting from Berlin via Istanbul and Aleppo to Cairo. There she stopped to refuel at Almaza, prior to continuing along the Nile, via Khartoum to Juba, then to Nairobi in Kenya, and via Johannesburg to Cape Town. After that the route was to take her home, up the west coast of Africa. Elly Beinhorn's plans would, however, be hampered by British colonial and imperial authorities on a number of occasions. Women were, for example, forbidden to fly over the Sudan without male escorts. Elly's objections were overruled and the German aviatrix had to accept two British aeroplanes – piloted by men – as her "escorts". The flight of three machines duly set off, but both the British pilots had to make emergency landings on the way, one suffering a burst tyre in the process. After checking that her companions were safe, Fraulein Elly Beinhorn flew on alone. Although Elly was not allowed to fly back to the two British pilots with their necessary spare parts, she argued her case so effectively that the British colonial authorities allowed her to complete the planned flight which eventually covered about 28,000 kilometres.

Meanwhile, the volatile but currently improving relationship between Britain and Egypt was almost uncannily reflected in the life one of the RAF's most junior personnel serving in Egypt at this time. His name was Frederick Weston and was one of those working-class youngsters who, having volunteered for service in the RAF in the interwar years, was amongst those known as "Trenchard brats". Marshal of the Royal Air Force Sir Hugh Trenchard was Chief of the Air Staff from 1919 until 1930, but his advanced thinking in such matters was not necessarily shared by an RAF officer class overwhelmingly drawn from the other end of the British social spectrum.

Around 1935, Frederick Weston was working as an aero engine specialist in the RAF Depot at Abu Qir when he met, and after a romantic and somewhat exciting courtship, married Rose Sadek, a member of an Egyptian Maronite Catholic family in Alexandria. The latter were of Lebanese origin and opposed the marriage, as did some of Fred Weston's superiors in the RAF. Nevertheless, Frederick and Rose were determined. Then, in 1936, Weston was transferred to No. 101 Squadron at Bicester in England, before subsequently returning to Egypt to be attached to the British Advisory Mission to the Royal Egyptian Air Force (see Volume Four).

Meanwhile behind the scenes, negotiations continued in an effort to improve relations between Egypt and the United Kingdom. Egyptians remained insistent upon achieving genuine independence, but events in the world beyond their frontiers now had a sobering impact upon Egyptian aspirations, at least within the country's ruling and political elites. Italian ruthlessness in crushing resistance in neighbouring Libya, and Mussolini's stridently proclaimed imperial ambitions had already caused nervousness in Egypt. When Italy invaded Abyssinia (Ethiopia) in October 1935, managing to conquer that previously unconquered country by May 1936, Egypt's own vulnerability was laid bare. Even more vulnerable was the Anglo-Egyptian Sudan, which most Egyptians still regarded as part of their own country despite disagreements with the British. Now there could no longer be real doubt that, without British help, Egypt could not defend itself effectively.

Beyond the Middle East and North Africa serious efforts had, for several years, been made to ban not only the use of poison gas in war, but to outlaw aerial bombardment altogether. This was at the heart of an international disarmament conference which opened in Geneva in May 1933. Sixty nations took part, but Britain, like most of the other major colonial or imperial powers, soon found itself in a difficult position. The United Kingdom government delegation even proposed "the complete abolition of bombing from the air, except for police purposes in outlying regions", but instead of receiving the applause they expected, the British caused near uproar.

Even the British Under Secretary of State for Foreign Affairs, the future Conservative Prime Minister Anthony Eden, questioned what was meant by "bombing for police purposes". The British government therefore found it necessary to explain that the right to bomb unruly "natives" was essential for the preservation of the British Empire. Within the United Kingdom, however, the moral ambiguity of trying to save British cities from aerial bombardment while trying to preserve the Empire by bombing "coloured" insurgents was not always obvious to a patriotic and largely imperialist public. Nevertheless, the British government's position on this matter was also attacked at home, especially by left wing politicians in the Labour Party. In October 1933, the new German Chancellor, Adolf Hitler (in office since 30 January 1933 but not made *Führer* or dictator until 2 August 1934), pulled his delegation out of the Geneva Disarmament Conference. Many people subsequently claimed that the British government's insistence on keeping what Liberal Party leader David Lloyd George criticised as "the right to bomb niggers" helped ensure the Geneva Conference's failure.

The future Labour Party Prime Minister Clement Attlee had already said in the House of Commons in June 1933, that it was hypocrisy to try to outlaw the bombing of European cities while continuing to blow up Arab nomad camps and Indian villages. A few weeks later, on 13 June, another Labour Member of Parliament, Neil Maclean had sarcastically suggested that the policy was a result of excessive Christian zeal:

> We send our missionaries to covert the people to our religion, and we send our bombers to send them to that Heaven which we are trying to convert them to believe in, more speedily than they would in the natural course. We think so much or our religion that we want them to go there first.

British pacifists were of the same opinion, and in September 1933 one sympathetic newspaper proclaimed: "If a frontier village can be bombed and destroyed, no objection can in principle be raised to the destruction of London or Paris or Berlin in a future war". The lack of morality in the British position was clear across the world, being highlighted by a pro-British Indian newspaper which pointed out: "If bombing is to be abolished it must be abolished everywhere. For a country like Britain, with its population crammed into overcrowded cities, peculiarly vulnerable from the air, to insist on the right to 'bomb and be bombed' is, apart from ethical considerations, sheer madness".

Two years later, in 1935, the looming threat of another major war in Europe finally prompted Britain and its Empire to start a serious programme of rearmament, and in 1939 the world would indeed be plunged into a new global conflict. By then the interwar policy of Air Policing or Air Control had resulted in the RAF dropping a significantly heavier weight of bombs than the RFC/RAF had dropped throughout the First World War. Indeed, some researchers have estimated that the tonnage of bombs dropped by British aeroplanes was almost as much as they would drop during the early years of the Second World War. There is no doubt that the strategy greatly reduced British casualties overall, but at the same time considerable effort had been put into minimising information available to the wider public concerning the destruction and casualties inflicted upon those regarded as anti-British dissidents or insurgents.

8

NEIGHBOURS: THE IRANIAN AND ETHIOPIAN AIR FORCES

THE IRANIAN EMPIRE

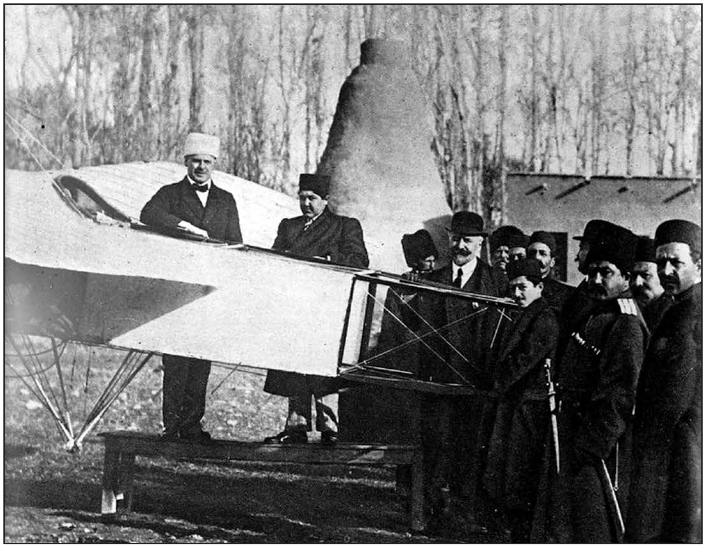
The Imperial Iranian Air Force, like that of neighbouring Iraq, was primarily created to deal with dissident groups and only secondarily as a force to confront external aggression. Like several Arab air forces, it also had a significant political function as a means of enhancing the prestige of the country and its government internally and externally. In the case of Iran, or Persia at it was then known, the air force's origins can be found in the nation's turbulent history in the immediate aftermath of the First World War. A handful of Persian officers had also been sent to train as aircrew in the neighbouring Ottoman Empire during the First World War (see Volumes One and Two), at a time when Persia was rent by factions and in large measure occupied by foreign forces; namely those of Russia, the Ottoman Empire and Britain.

Following the end of the Great War, the British made a determined effort to dominate a currently anarchic Persia, maybe even to reduce it to something comparable in status to neighbouring British-occupied Iraq. In 1919, as part of this process, the Persian authorities had little option other than to sign an agreement which would install British advisers to run the country's treasury and armed forces. It is also important to realise that Persia-Iran had long been seen as a cultural, political and religious rival by most Arab states of the Middle East and continues to be seen in this light by several of them. Persia had also been predominantly Shi'a Muslim for several centuries, whereas the overwhelming majority of Arab states were either Sunni Muslim or were dominated by Sunni Muslim commercial and cultural elites. This was currently true even where the lands in question had either Shi'a Muslim majorities or substantial Shi'a Muslim minorities. Consequently, the emergence of a significant Iranian Air Force was a factor in the Arab states' desire for air forces of their own, especially in Iran's immediate neighbour Iraq.

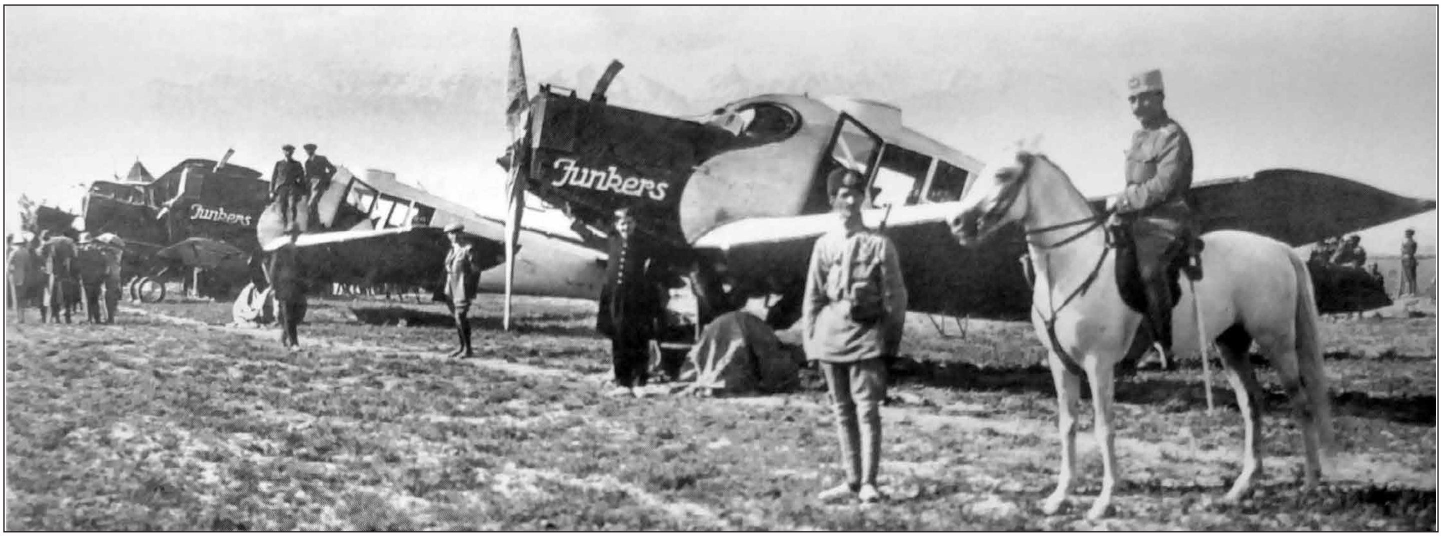
In 1922 Iran's Prime Minister was Reza Khan, a notably energetic man who had earlier been a staff officer in the Persian Cossack Regiment. He now set up an "Air Office" in the Iranian Army Headquarters. Furthermore, Reza Khan was largely responsible for re-establishing order across the country after the chaotic years which followed the First World War. His new "Air Office" was then charged with assessing the possibility of creating a military air arm to further strengthen the central government's authority.

By that time the Junkers firm in Germany had already established an overseas branch in Iran, operating postal and passenger services between Tehran, Mashad and Shiraz. Not surprisingly, therefore, Reza Khan turned to Junkers to supply Iran's first military aircraft, which was an all-metal Junkers F.13 flown on behalf of the Iranian Army by a German contract pilot. Based at Galeh-Murghi, the Junkers monoplane was soon joined by a Czechoslovakian Aero A.30 in 1923. This army-cooperation, light reconnaissance-bomber biplane would retrospectively be redesignated as the Aero A.130. It had been purchased with subscriptions raised by the Gilan and Astrabad Brigades of what was then the Persian Army. Both aeroplanes shared the Imperial Iranian Air Force's first facilities, which consisted of a tent and a hanger made of rush matting, erected at Galeh-Murghi airfield. Back in Germany, on 7 October 1928 a man named Mahmud Farsin – whose nationality was not recorded but whose name sounds Persian – had a minor accident in a Junkers F.13 (serial number D-870). He was learning to fly at the Deutsche Verkersfliegerschule (German Commercial-Aviation-School), perhaps training on these machines prior to flying them in either a civil or a military guise in his home country.

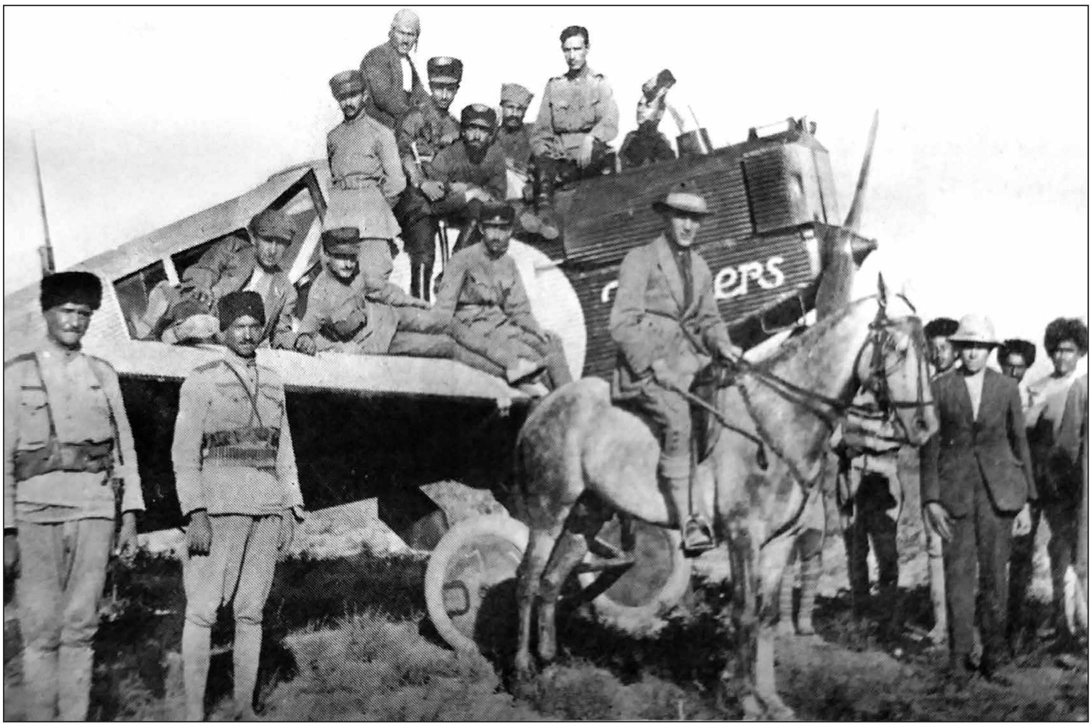
During the mid and late 1920s the government of Reza Khan continued a determined effort to provide Iran with a real air force, and in this the Prime Minister sought help from wherever it could be found. Early in 1924 the Iranian Air Arm received four British designed, but Soviet Russian built, De Havilland DH.4 and DH.9 reconnaissance bombers from the Soviet Union. Four further Junkers F.13 transports were also purchased from Germany. These machines were flown by German and Russian pilots who had offered their services to Iran. This period certainly saw a small number of aspiring Persian pilots learning to fly in Germany. Amongst the first was Mohammed Hakimi Eddi, from Bushihr (Bushir) in southern Iran who studied at the Stahlwerk Mark aviation school in Breslau (now Wroclaw in western Poland) in 1925. Like the Egyptians who similarly learned to fly in Germany around this time (see



The first powered flight over Tehran, the capital of what was then called Persia, now Iran, was on 4 January 1914. The machine was described as being a Russian Bleriot XI monoplane, in fact a Russian-built copy known as the Rossiya-B. The pilot, named Kuzminskii, was Polish (seen on the left wearing a white Persian cap) and he had already earned fame as an exhibition airman in various places. Also present in this photograph is Ahmad Shah (second from left), the last ruler of the Qajar dynasty. (Private collection)



Two of the Junkers F.13s (c.n. 675 & 676) supplied to the Imperial Iranian Air force – or Persian Air Force as the British insisted on calling it – and fitted with dorsal machine gun positions. Here they are lined up at Galeh-Murghi aerodrome outside Tehran during an air display on 25 May 1924. (Gunther Ott archive)



A Junkers F.13 of the Iranian Air Force which was sent to Borujerd in the south-west of the country late in May 1924. There it supported the Iranian Army against Luri dissidents, remaining about one month. The man on a horse may be the machine's German contract pilot. (Leon Manoucherian archive)

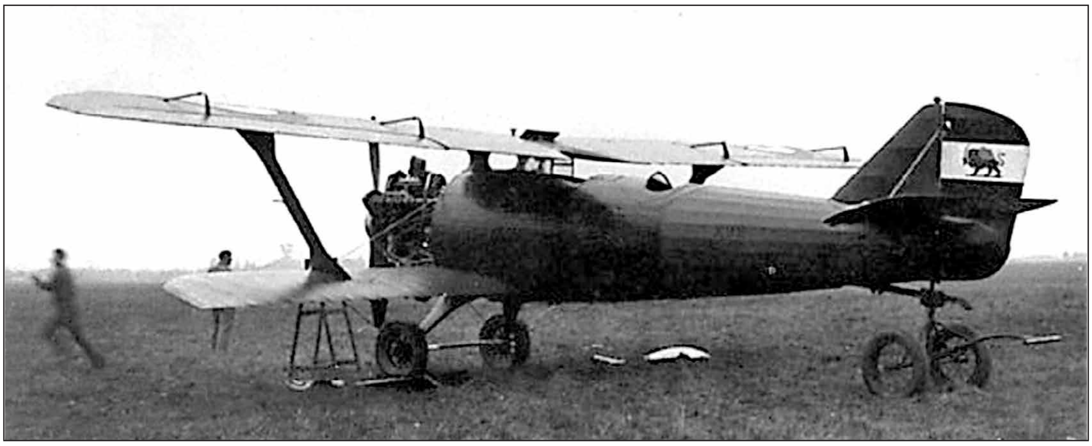
Volume Four), Mohammed Hakimi Eddi attended a small flying school which was run by one of Germany's struggling aircraft manufacturing companies, almost certainly learning on a Rieseler R II or a Rieseler R III/22. The former was a small single-seater sports plane designed by the brothers Werner and Walter Rieseler in 1921 at their factory, the Stahlwerk Mark Abt. in Breslau.

It is also interesting to note that in 1923 a Rieseler R III/22 had been landed on the famous Unter den Linden street in the heart of Berlin by Antonius Raab, the scion of a leading anti-Nazi family. Raab would join with Kurt Katzenstein to establish the Raab-Katzenstein aircraft manufacturing company on whose training aeroplanes some of the first Egyptian pilots learned to fly (see Volume Four). After the Nazi's came to power Antonius Raab left Germany and moved around Europe, setting up various short-lived businesses until the Nazi invasion of Greece forced him to flee to Egypt where he continued to support the anti-Nazi cause and made a film designed to encourage Egyptian support for the Allies during World War Two.

Later in 1924 a number of aircraft were purchased from France, with French pilots being hired to fly them from the Persian Gulf port of Bushihr, where they had arrived by ship in crates, to Tehran. Unfortunately, this exercise met with disaster, only one aeroplane reaching its destination intact. The remaining Spads, Breguets and Potez biplanes all came down in appallingly difficult mountains and deserts between the Gulf and the Iranian capital, one making a forced landing at Kazerun while the others crashed elsewhere in the unmapped mountains of Bakhtiari and Chahar Mahaal Province.

Nothing would deter Reza Khan, however. Some Iranian Army officers had already been sent to France and Russia for flying training early in 1924. The men sent to Russia were supposed to fly back in Soviet built Polikarpov R-1s, which were unlicenced versions of the British DH.9A reconnaissance aircraft, but again disaster struck and only one aeroplane reached its destination undamaged. During the summer of 1924 the air force was officially established as an integral part of the Iranian Army, being known as the Air Office of the Imperial Iranian Army. On its staff were technical advisors from the Soviet Union, Germany and France while its early equipment consisted of a mixed collection of army cooperation types, mostly of French or Russian manufacture. This tiny force was still based at Galeh-Murghi airfield outside Tehran, though it had other landing fields dotted around the huge Iranian state.

In December 1924 Prime Minister Reza Khan was proclaimed Shah or Emperor and took the title of Reza Shah Pahlevi. Meanwhile,


In 1924 Iran purchased an impressive array of military aeroplanes from France, including Spads, Breguets and Potezes. One of the Iranian Breguet Br.19s is seen here, probably before delivery. All except one of this ambitious order of French machines was lost in forced landings or crashes during their delivery flights across the unforgiving Zagros Mountains from Bushir on the Persian Gulf to Tehran. Not all were destroyed, and the Imperial Iranian Air Force eventually operated two of these Breguet Br.19 light bombers. (Jarrige archive)

his interest in military aviation was by no means diminished, causing further concern in British imperial circles. The frustration and even confusion within the British government can be seen in one of those internal memoranda, originally confidential though not officially secret, which have now been made public. Written in 1926 in the context of "Policy re Native Aviation", it noted that:

> Persia has had Russian, French and German air personnel simultaneously engaged on the development of military and civil aviation. Our policy has been to avoid any tendency to foster a desire on the part of the Persian General Staff to secure British training for their flying personnel on the grounds of reactions in Iraq, Egypt and elsewhere, the desirability of letting other powers bear the discredit likely to result from the probable failure of their efforts to organise an efficient Persian air service, and Persia's rickety finances. We have, however, endeavoured to induce the Persians to purchase British machines and engines from the trade. [In other words, from British aircraft manufacturing companies.]

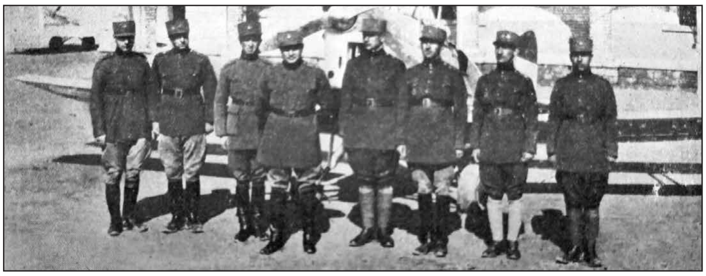
The new Shah nevertheless set about increasing Iran's military capabilities with some success, and in 1932 Reza Shah instituted an ambitious modernisation programme, which led to the Air Office of the Imperial Iranian Army being given a new title as the Imperial Iranian Air Force. This it would retain until the Islamic Revolution of 1979. Early in 1933 the Imperial Iranian Air Force received the first of 25 De Havilland Tiger Moths which the country had ordered. It was handed over at Ahwaz, in the south-west of Iran, close to the Iraqi frontier. This ceremony was attended by General Ahmad Khan Nakhitchevan, the Air Force's Commanding Officer, and Captain Azami, the Commander of the Air Force's Flying School in Tehran. Also in 1933, the Iranian Air Force acquired ten Polikarpov R-5 reconnaissance aircraft from the Soviet Union, but apparently this machine was never popular amongst Persian aircrew or maintenance personnel.

One of the Shah's other priorities was to reduce foreign, and most especially British, influence within Iran and so he sought to establish ties with other, less threatening countries. Having met the founder of the new Turkish Republic, Mustafa Kemal Ataturk in 1934, Reza Shah would visit Turkey in 1939. On his return he ordered that an Iranian Aero Club be established to encourage both men and women to fly. This was also expected to prepare for the establishment of an air mail service within the country. At first there were only a handful of recently purchased light training aeroplanes at the Club's base outside Mehrabad, but this opportunity was promptly seized by three pioneers of women flying in Iran –Effat Tejartchi, Sadiqeh Farrokhzad Dowlatshi and Ina Avshid. Of these women, the 22-year-old Tejaratchi was the first to join the Iranian Aero Club at its first home outside Mehrabad.

THE ETHIOPIAN EMPIRE

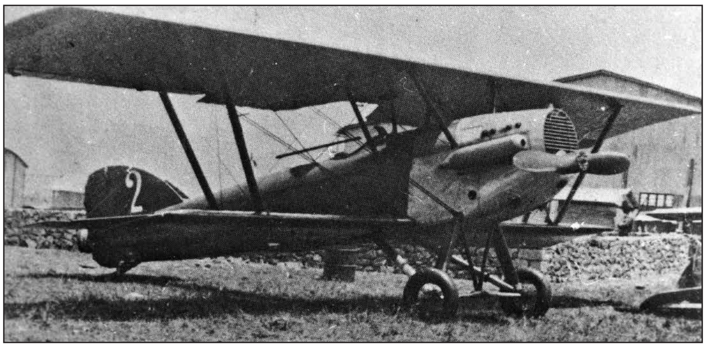
Unlike the Imperial Iranian Air Force, the Ethiopian Air Force was never seen as posing a threat to its Arab neighbours; not to the Egyptians in the Anglo-Egyptian Sudan to the east, nor to the Arab monarchies on the other side of the Red Sea. On the contrary, it might have been seen as an inspiration, or at least as a source shame because this supposedly "backward" African nation managed to operate a truly independent air force while Egypt's Air Force remained under very close British control. Of course, the cultural, religious and military links between Ethiopia and Egypt went right back to the early medieval period, if not earlier. Furthermore, they

Early in 1924 the Iranian Air Arm purchased several Soviet Russian Polikarpov R-1 bombers from the USSR. These were unlicenced copies of the British De Havilland DH.9A, though in fact only one is said to have reached Persia, all the others being damaged during their delivery flights. (Author's collection)


Iranian Air Force officers in front of one of the Imperial Iranian Air Force's first De Havilland DH.82 Tiger Moths at Ahwaz in 1933, one of a batch of 20 such machines. Fourth from the left is Gen. Ahmad Khan Nakhitchevan, the Commander of the Imperial Iranian Air Force. To the right of the General is Capt. Azami, CO of the Iranian Air Force Flying School outside Tehran. (Author's collection)

De Havilland DH.82 Tiger Moths of the Imperial Iranian Air Force Flying School with the snow-covered Elburz Mountains in the distance. The closest aeroplane has its serial number, 105, in distinctive Persian numerals on both upper wings. (Author's collection)

Polikarpov R-5 reconnaissance aircraft of the Iranian Air Force, code number 22. It was one of 10 acquired from the Soviet Union in 1933. The aeroplane on the right is one of the radial-engined Hawker Audaxes purchased from Britain in 1933 and 1934. (Author's collection)



One of the six Potez 25.53s purchased by the Ethiopian Air Force in 1929 and delivered over the next year or so. For some time it had the words "Bird of the Crown Prince" in large Amharic script along the fuselage, but this was apparently removed before or during the Italian invasion. No. 2 is also believed to have been the only Ethiopian Potez to survive the Italian conquest. (J.L. Coroller archive)

had persisted throughout the intervening centuries, despite occasional conflicts.

Ras Tafari Makonnen, the future Emperor Haile Selassie and currently the regent of what was then called Abyssinia, witnessed the capabilities of air power during an RAF demonstration on the other side of the Red Sea in Aden (see above). On this occasion he reportedly flew as a passenger himself, and on his return home Ras Tafari Makonnen certainly urged the Abyssinian government to establish an air force. Its first machines were French Potez 25.53 A2 reconnaissance aeroplanes, which arrived in Addis Ababa on 18 August 1929. The first was actually flown by André Maillet, a former French First World War military pilot and subsequently an aeroplane designer. In the meantime, however, Maillet was put in command of this new African flying corps. The next type of aeroplane to arrive was an all-metal monoplane, the German Junkers W 33c, which was added to the Air Force's inventory on 5 September 1929.

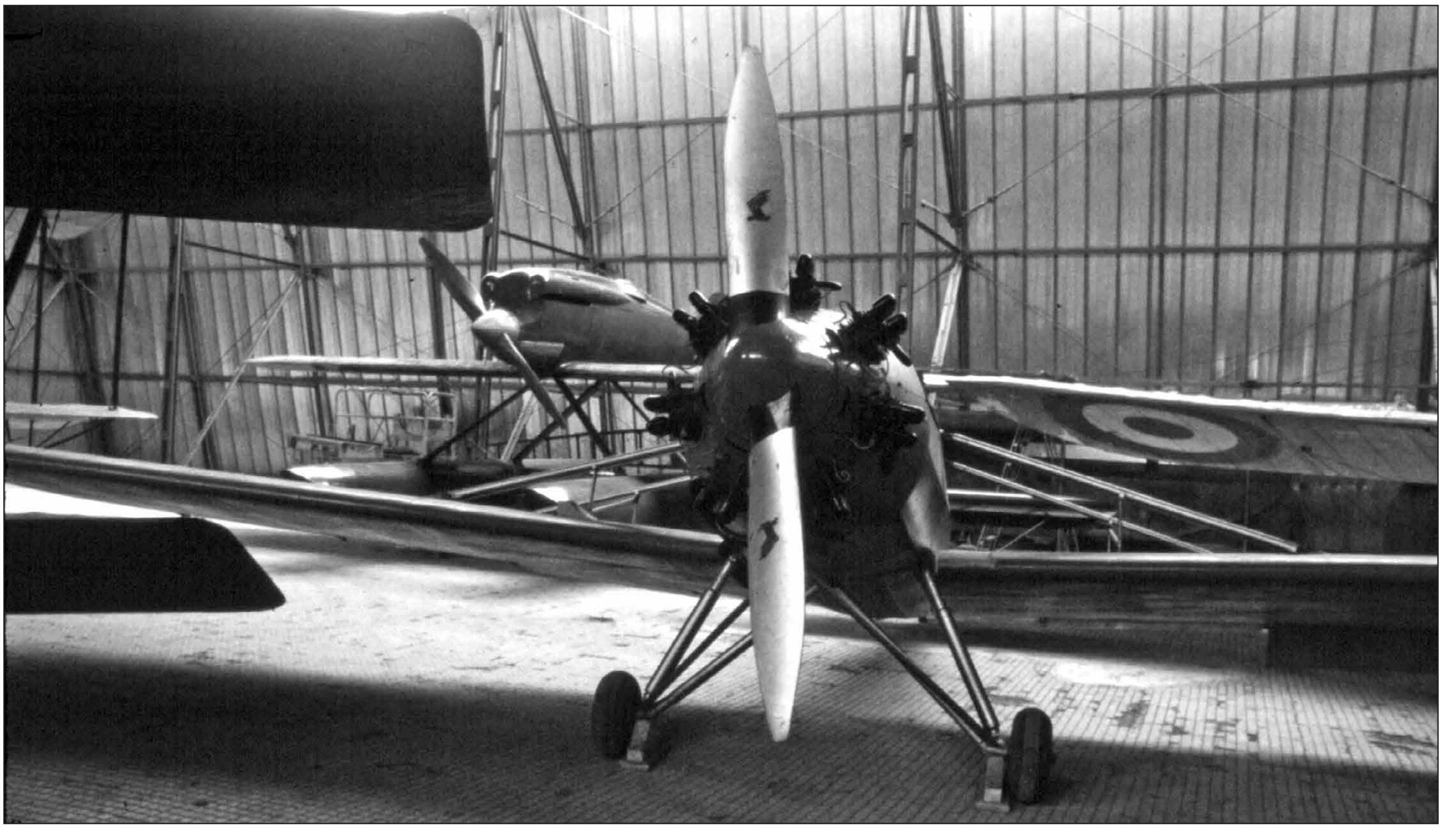
It was not long before the force was in action against an attempted coup by more conservative forces, nominally supporting the Empress Zauditu, which aimed to overthrow the modernising *Negus* or King (as he then was) Tafari Makonnen. In fact, the first use of aircraft by the Ethiopians was when three Potez biplanes showered leaflets on rebel forces on 28 March 1930. Three days later three Potez 25.53 A2s dropped bombs, or more likely hand grenades, during the battle of Anchem where the conservative forces were defeated. This victory led to the elevation of *Negus* Ras Tafari Makonnen to the rank of Emperor Haili Selassie.

To celebrate Haili Selassie's Imperial coronation, France sent Ethiopia a Farman aircraft while Italy sent a Breda. Only a month after the victory at Anchem a flying school was established outside Addis Ababa, led by another French pilot, Gaston Videl. His first seven Ethiopian pilots included Mishka Babitcheff, the son of a Russian émigré and an Ethiopian mother who would be placed in command of the Ethiopian Air Force when Italy invaded his country in 1935. Another early student was Mulu-Embet Imru, who is believed to have been Africa's first black woman pilot, while two male students were sent to train in France. All were drawn from the Ethiopian aristocracy and had been educated in French, either in Egypt or in France itself.

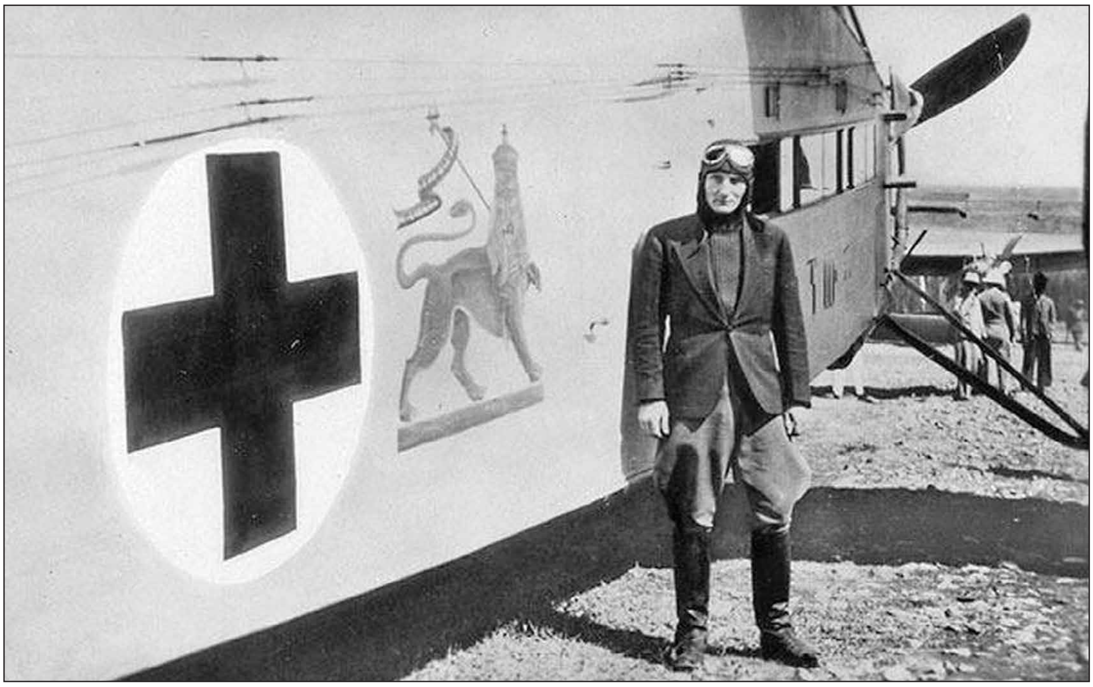
Two years later the Ethiopian Air Force received six further aeroplanes, making a total of twelve machines. The Imperial Ethiopian Air Force also acquired a small number of transport aircraft, which were used for casualty evacuation. André Maillet was replaced as commander of the Ethiopian Air Force by another Frenchman named Paul Corriger who was already flying for the Ethiopian Emperor. Corriger was still in charge when Ethiopia was invaded by the Italians in 1935, whereupon he was replaced by Mishka Babitcheff, one of the country's first indigenous pilots. Unfortunately, the tiny Imperial Ethiopian Air Force still only had two fully qualified Ethiopian pilots, Mishka Babitcheff himself and Assfar Ali, the rest of the airmen being foreign mercenaries.

Although it did what it could, the Imperial Ethiopian Air Force was unable to resist the huge forces thrown against the country by Mussolini. By then its equipment included four of the Potez 25s, two Beech B.17s, a Fokker F.VIIa/3m, a Fokker F.XVIII, a rebuilt De Havilland Moth and a Breda sports plane. Only the Fokkers were in good condition while the Potez 25s needed overhaul and, in fact, carried no guns.

There was also a Meindl/van Ness A-VII – otherwise called an M7 – which was assembled in Ethiopia under the direction Ludwig Weber. This work had to be carried out with the help of largely unskilled local craftsmen using specially designed tools. The aircraft was powered by an air-cooled Walter NZ 80 seven-cylinder engine and, after assembly, was flown over the Ethiopian capital, which already lay at 2,500 metres above sea level. For this reason,



The Meindl/van Ness A-VII or M7, which was assembled in Ethiopia under the direction of Ludwig Weber. This distinctive little aeroplane survived the Italian conquest, was sent back to Italy as a war trophy, and was subsequently preserved in the Italian Air Force Museum at Vigna di Valle in the mid-1970s. However, its overall red colour scheme was probably an Italian addition. (Author's photograph)



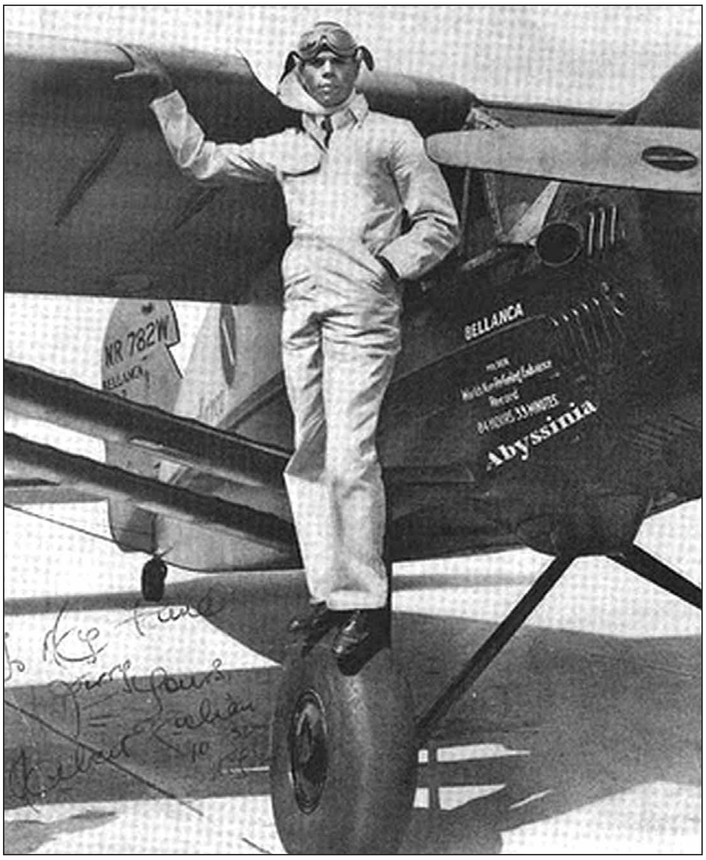
Men of European heritage also fought against Mussolini's invasion of Ethiopia. The aeroplane is the country's only Fokker F.VIIa/3m and bears the Crowned Lion insignia of the Ethiopian Empire, plus Red Cross markings. It was photographed in 1936. (Author's collection)

the Ethiopian A-VII had been provided with additional high-lift flaps which also served as ailerons. Ludwig Weber himself described the flight:

> The speed was measured over a distance of 50 km back and forth in relatively calm weather, reaching 230 to 240 kmph and reaching an altitude of 2,500 to 3,500 metres in about seven minutes. Stability on all three axes was excellent .... It can be said that, in terms of manufacture, flight performance and flight characteristics, the type is amongst the top of its class amongst similar machines and has exceeded my expectations.

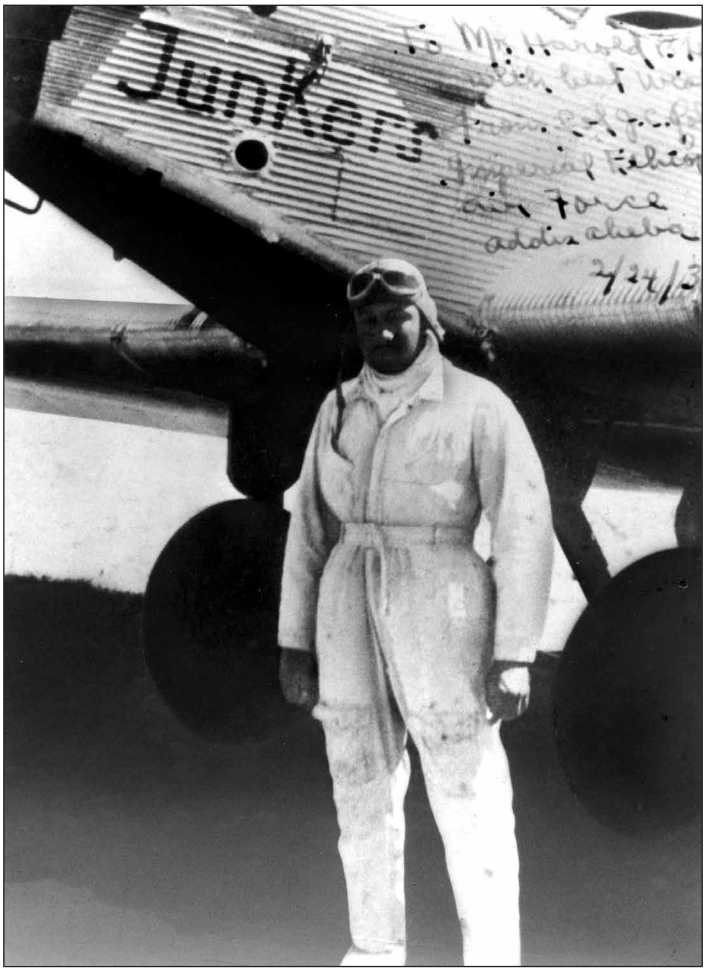
In the mid-1930s Ethiopia was visited by some other well-known pilots who, being of African heritage, wanted to support this bastion of African independence and its efforts to modernise. One such was Hubert Fauntleroy Julian from Trinidad, known as the Black Eagle. Unfortunately, on his second visit Hubert Julian crashed Emperor Haili Selassie's favourite aeroplane and was therefore asked to leave the country. He returned on the eve of the Italian invasion of Ethiopia and was given a military commission, with the intention of helping fight the Italians. Sadly, Julian soon quarrelled with another foreign black pilot, John Charles Robinson, and left Ethiopia for the final time. By then it was also clear that Mussolini's armies would triumph.

The African American pilot, J.C. Robinson from Florida, volunteered to fly for the Ethiopian Air Force in January 1935 and became known as the Brown Condor during the struggle against



Hubert Fauntleroy Julian from Trinidad was sometimes known as the Black Eagle and was one of those men of both African and European heritage who travelled to Ethiopia to help Emperor Haile Selassie establish an air force. He is seen here with the American Bellanca J-2 (number NR782W) which had earlier broken the world non-refuelling endurance flight with a time of 84 hours and 33 minutes. It was then purchased by Julian who added the name Abyssinia and intended to fly the machine to Africa. However, the Bellanca was destroyed on take-off. (Private collection)

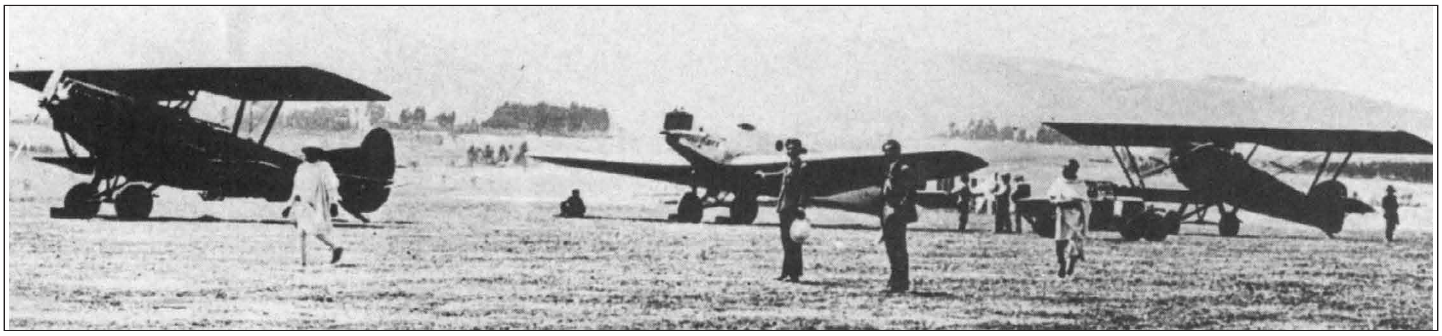
Capt. Robinson giving instructions to Ethiopian pilots at an unspecified date. (Private collection)



John Charles Robinson from Florida in the USA was another pilot of African heritage who offered his services to Ethiopia in the face of Italian Fascist aggression. He is seen here in front of a Junkers W 33c of the Ethiopian Air Force, outside Addis Ababa, 24 Feb 1936. (Private collection)

the Fascist Italian assault. Like Julian he was given a commission, and his first task after arriving in Addis Ababa was to train more Ethiopian aircrew. The actual invasion came several months later, on 3 October 1935, when the inexperienced Ethiopian Air Force also found itself hugely outnumbered. The following year John Charles Robinson returned to the USA. After the Second World War and the liberation of Ethiopia he returned to the country, but died in Addis Ababa on 27 March 1954, following an aeroplane crash.

By the end of Italo-Ethiopian War in May 1936, the Ethiopian Air Force had effectively ceased to exist. Yet one of Emperor Haile Selassie's aeroplanes nevertheless still survives – the little Meindl/van Ness A-VII monoplane which the conquering Italians took home with them as a trophy and which was preserved in the Italian Air Force Museum at Vigna di Valle.



Ethiopia's only Junkers W 33 between a Hispano and a Lorraine powered Potez 25, almost certainly on the Ethiopian Air Force's main aerodrome outside Addis Ababa. (Jürg Meister archive)

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